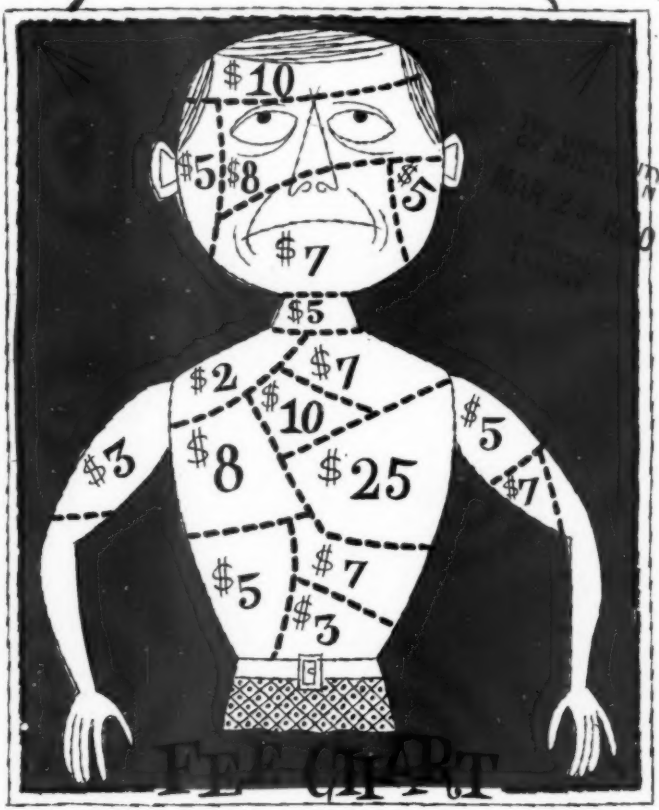
Resident Physician

JOURNAL FOR THE HOSPITAL STAFF OFFICER

MARCH 1960
VOL. 6 NO. 3

THE FUTURE OF THE INTERNSHIP
page 68



What to Charge, How to Collect

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Resident Physician

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Articles

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Resident Physician

Departments

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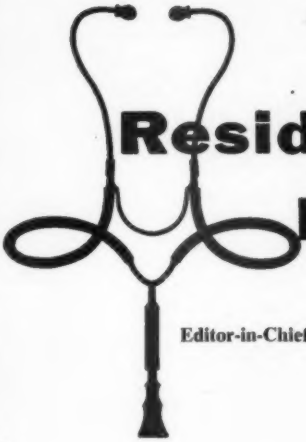

Resident Physician

March 1960, Vol. 6, No. 3

Articles are accepted for publication with the understanding that they are contributed solely to this publication, and will directly interest or be of practical value to resident physicians and interns. When possible, two copies of the manuscript should be submitted.

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"quiets down" the queasy, spastic colon—through the gentle sedation of BUTISOL Sodium® butabarbital sodium 15 mg. and the relaxing action of *natural* extract of belladonna 15 mg. The central and peripheral effects of BUTIBEL are of approximately equal duration—no overlapping sedation or inadequate spasmolysis.

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Resident Physician

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Elipten is a new anticonvulsant chemically unrelated to other antiepileptic agents. Clinical trials in thousands of patients have shown that it controls most types of epilepsy and is especially effective when combined with other anticonvulsants.

Improves Control, Alertness, Learning Ability

With Elipten, more epileptic patients can be completely or adequately controlled. Elipten reduces the frequency of seizures in most types of epilepsy and is often effective in refractory cases, especially when combined with other anticonvulsants. Used adjunctively, it often permits reduced dosage of other drugs, thus minimizing their side effects; in some cases, other drugs can be eliminated.

By obviating or reducing the need for barbiturates, Elipten improves alertness and learning ability in children. It has little or no toxic effect on liver, kidney, or blood.

Forster[1] states: "Elipten . . . has a definite role in improving the therapy, particularly of petit mal epilepsy." He notes further that Elipten ". . . oftentimes will turn the tide when added to partially successful medication." Meyer[2] observes: ". . . it is useful in the control of petit mal epilepsy and is of particular benefit in those cases where petit mal and generalized convulsions are combined." Lambros[3] notes complete control or marked improvement in 27 of 35 patients treated with Elipten (13 were gradually switched to Elipten alone; 14 were given other anticonvulsants adjunctively). Niswander and Karacan[4] report that in 38 hospitalized psychotic epileptic patients given Elipten grand mal seizures were reduced 25 to 35 per cent. Carter[5] recommends concomitant use of Elipten and diphenylhydantoin sodium ". . . to enhance effectiveness and reduce the dosage of both drugs."

Complete information on Elipten is available on request.

2/2704M8

SUPPLIED: *Tablets,* 250 mg. (white, scored); bottles of 100.

1. Forster, F. M.: Wisconsin M. J. *58*:375 (July) 1959. 2. Meyer, J. S.: M. Times *87*:743 (June) 1959. 3. Lambros, V. S.: Dis. Nerv. System *19*:349 (Aug.) 1958. 4. Niswander, G. D., and Karacan, I.: Am. J. Psychiat. *116*:260 (Sept.) 1959. 5. Carter, C. H.: Dis. Nerv. System *21*:50 (Jan.) 1960.

CIBA
SUMMIT, NEW JERSEY

Therapeutic Reference

The following index contains all the products advertised in this issue. Each product has been listed under the heading describing its major function. By referring to the pages listed, the reader can obtain more complete information. All products are registered trademarks, except those with an asterisk(*).

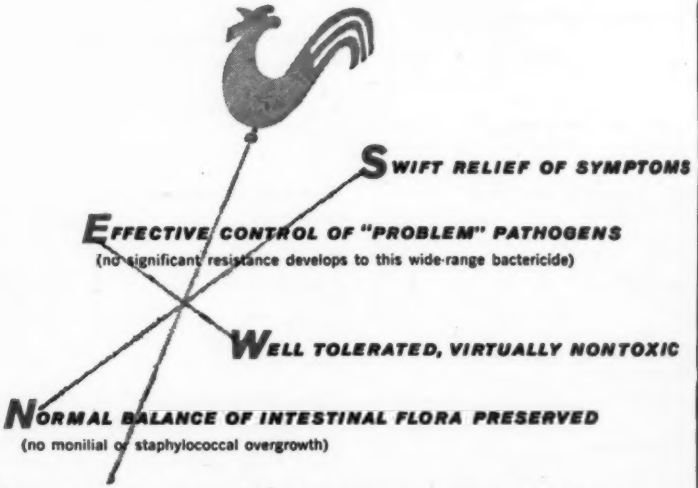
TO STOP DIARRHEA

from all points... growing evidence favors

FUROXONE®

brand of furazolidone

■ Pleasant-flavored LIQUID, 50 mg. per 15 cc. (with kaolin and pectin) ■ Convenient TABLETS, 100 mg. ■ Dosage—400 mg. daily for adults, 5 mg./Kg. daily for children (in 4 divided doses).



From a Large Midwestern University:

FUROXONE CONTROLS ANTIBIOTIC-RESISTANT OUTBREAK

An outbreak of bacillary dysentery due to Shigella sonnei was successfully controlled with FUROXONE after a broad-spectrum antibiotic had proved inadequate. Cure rates (verified by stool culture) were 87% with FUROXONE, 36% with chloramphenicol. Only FUROXONE "failures" were those lost to follow-up. Chloramphenicol failures subsequently treated with FUROXONE responded without exception. FUROXONE was also used effectively as prophylaxis and to eliminate the carrier state. It was "extremely well tolerated in all 191 individuals who received it either prophylactically or therapeutically."

Galeota, W. R., and Moranville., B. A.: Student Medicine (in press)

EATON LABORATORIES, NORWICH, NEW YORK

Viewbox Diagnosis

Edited by Maxwell H. Poppel, M.D., F.A.C.R.,
Professor of Radiology, New York University College of Medicine
and Director of Radiology, Bellevue Hospital Center

Fifty-eight year old male. Chief Complaints—three months of dysuria, nocturia and painless hematuria.

Which is your diagnosis?

1. Polycystic kidney
2. Stone in right ureter
3. Ca. of right kidney
4. Bladder tumor

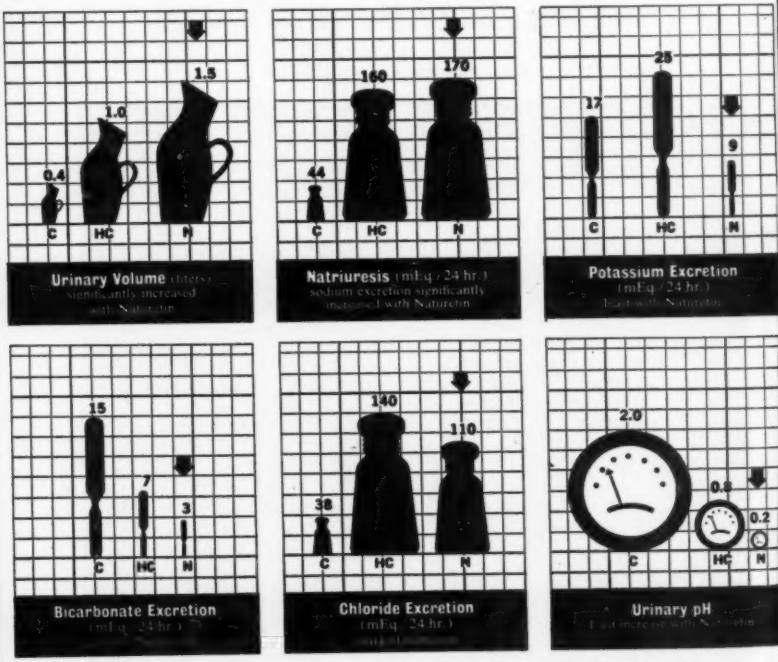
(Answer on page 172)

Naturētin more closely approaches the ideal diuretic

Squibb Benzydroflumethiazide

"When compared to other members of this heterocyclic group of compounds, this drug [NATURETIN] shows a significantly increased natriuresis and decreased loss of potassium and bicarbonate. In this respect it more closely approaches a natural or 'ideal diuretic.' It is effective upon continuous administration and causes no significant serum biochemical changes. It is effective in a wide variety of edematous and hypertensive states and represents a significant advance in diuretic therapy." *Ford, R.V.: Pharmacological observations on a more potent benzothiadiazine diuretic; accepted for publication by the American Heart Journal.*

Comparison of electrolyte excretion pattern for the 24 hours following typical doses of chlorothiazide, hydrochlorothiazide, and Naturetin[1]

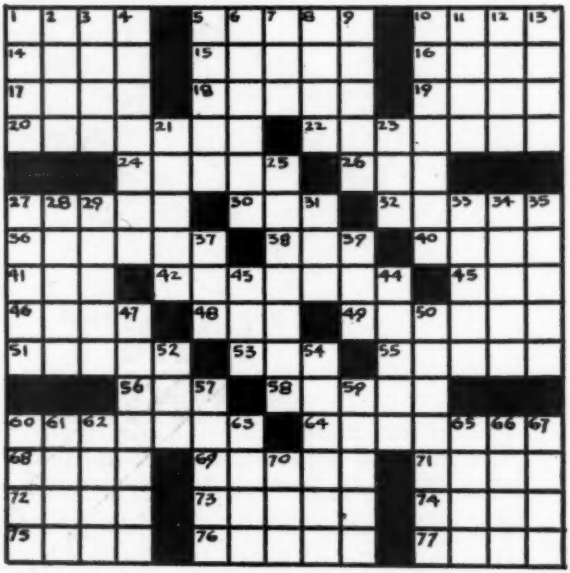


Typical Doses: Chlorothiazide—1,000 mg.; Hydrochlorothiazide—50 mg.; Naturetin (Benzydroflumethiazide)—5 mg.

1. Adapted from: Ford, R.V., Squibb Clin. Res. Notes 2:1 (Dec.) 1959

Resident Relaxer

(Answer on page 172)



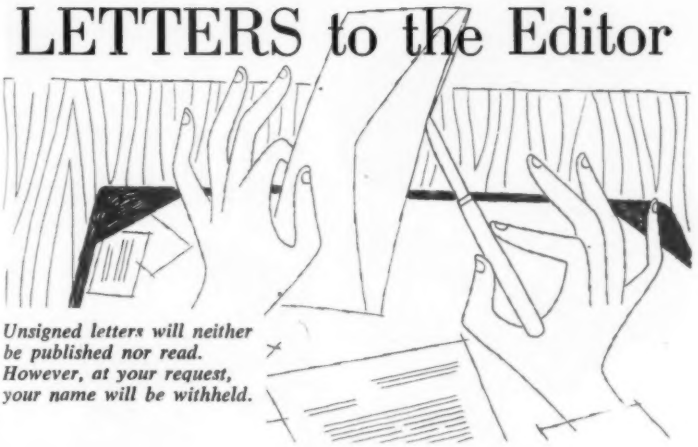
ACROSS

1. Influenza
5. Thin serous fluid from a wound
10. Sodium, lutecium (symbols)
14. Fixed ratio
15. Fragrance
16. Economy (abbr.)
17. Accessory covering of seeds
18. Tendon of a muscle
19. Proton
20. Middle layer of the iris
22. Tumor made up of nerve cells
24. Healthy tissue in a diseased area
26. Radon, oxygen (symbols)
27. Part of limb left in amputation
30. Perceive
32. The forefinger
36. Decree
38. Nonprotein nitrogen (abbr.)
40. Scorch
41. Cover
42. Quantity of matter in a given space
45. Nitrogen, gallium (symbols)
46. Tubular passage
48. Also
49. In part
51. Pertaining to the ectoderm
53. Contorted
55. Ascends
56. A cupping glass
58. Opens mouth involuntarily through drowsiness
60. Conjunctivitis
64. Inflammation of the nose
68. Toward the lee
69. Singing birds
71. Wait expectantly
72. For fear that
73. Attribute
74. Gaunt
75. Vessels
76. Charles ..... (English Novelist)
77. Former

DOWN

1. Measure of weight
2. Scarce
3. Inflammation (suffix)
4. A livid spot
5. Condition resulting from a morbid process (suffix)
6. Turning point of a disease
7. Honorable (abbr.)
8. Foreboding
9. More raw
10. Nerve cells
11. Extremity (comb. form)
12. Frame for weaving
13. . . . -Pappenheim stain
21. Very swift
23. One (prefix)
25. Pertaining to sensation
27. Not fluid
28. Hackneyed
29. Mammary gland of cattle
31. Upon (prefix)
33. Slight depression (pl.)
34. Test for syphilis
35. Roentgen rays
37. Meshed fabric
39. Normal temperature and pressure (abbr.)
43. At this time
44. Stories
47. Deficiency disease of childhood
50. Ludicrous
52. Hint
54. Jerked
57. Pertaining to the pyla
59. Useless material
60. A feeler
61. Relating to the ileum (prefix)
62. Bird's abode
63. Comfort
65. A row
66. Belonging to Ida
67. Dispatched
70. Right sacro-anterior position of fetus (abbr.)

LETTERS to the Editor



Unsigned letters will neither be published nor read. However, at your request, your name will be withheld.

Selection

For the letter-writer who expressed confusion as to how to select a residency program, I should say that many of us were in the same boat at some time or another. There is no service which provides this information —I guess it would be a pretty tough job, not to mention the repercussions when programs were given relative rank. Some brave educator could certainly do his profession proud if he were to undertake a study of residency programs—even if in only one specialty—although I'm sure the findings would rival the Flexner Report in shock appeal.

Programs in all specialties are losing approval and being granted approval year by year. For the average intern to tell a "paper program" from a real meaty training course would require a resident and intern convention every six months or so; here, they could all compare notes and thrash out a list, from best to worst. Lacking this, we are left considering the following:

1. Check the residency number of the *J.A.M.A.* which comes out in the first week of October each year. Take careful note of: a) chief of service—reputation is your best guide, b) the hospital, c) the teaching affiliation and d) such things as autopsy percentage, number of professors, beds

—Continued on page 38

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in total infant nutrition with a physiologically balanced, complete formula — for a clinically smoother course of formula feeding

easier on everyone concerned — because BREMIL-fed babies are less subject to commonly occurring problems such as digestive upset, diaper rash, perianal dermatitis, and hyperirritability (only *liquid* formula food with a guaranteed standardized physiologic Ca:P ratio of 1½:1)

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Powdered — 1 level measure to 2 fl.oz. hot water.
1-lb. tins.

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Each capsule contains:

Thiamine Mononitrate (B_1)....	10 mg.
Riboflavin (B_2)	10 mg.
Niacinamide	100 mg.
Ascorbic Acid (C).....	300 mg.
Pyridoxine HCl (B_6)...	2 mg.
Vitamin B_{12}	4 mcgm.
Folic Acid	1.5 mg.
Calcium Pantothenate.	20 mg.
Vitamin K (Menadione).	2 mg.

Average dose 1-2 capsules daily.

STRESSCAPS®

Stress Formula Vitamins Lederle

1. Spies, T. D.: J. A. M. A. 167:675 (June 7) 1958.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

—Continued from page 35

on the service. Also check the *J.A.H.A.* annual hospital guide number.

2. Consider the recommendations of leading specialists in your field in whom you have confidence. If you can locate a resident who has already completed his training, ask his honest opinion concerning the quality of the residency program.

All of this is a rather tedious process requiring investigation by correspondence and in person. Yet, considering the time and money you are prepared to invest in your training, doing anything short of the above would be to shortcut your own best interests.

As another source of information on hospital residencies, I commend to all the series of articles in RESIDENT PHYSICIAN, one each month, describing various teaching centers in the U.S. These tell you a lot about facilities and top men in the teaching and administrative setups. All in all, there's no pat solution. But, there are enough avenues open so that the search for an excellent program can be made productive in most cases.

JOHN G. PERSONS, M.D.
BROOKLYN, N. Y.

ECFMG

When is the next Education Council for Foreign Medical Graduates Examination and when is the deadline for certification?

JOSE V. TLANAS, M.D.
NEWARK, NEW JERSEY

• *March 16 and September 21 are next exam dates. July 1, 1960 is deadline for certification.*

Exchange Visitor Visa

In the January issue of your monthly column, "Letters to the Editor," is a letter concerning the extension of visas for exchange visitors. You are correct in that the five year maximum law for this visa is in effect. However, this is to advise you that there is one possible way to get the visa extended. I am personally acquainted with this since I have completed five years of residence in this country and have recently been able to accept an additional two years in a residency program.

There is one clause in the law which states that under special circumstances of study, an exchange visitor visa can be extended by the Director of the International Exchange Service, 1910 K Street, N.W., Washington 25, D.C.

—Continued on page 44

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distance.
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Adams, M.D

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surgery. I
laminector

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for thorac
lar surger
landmar
shoulders
isolated fr
cleaner, dr
is possible
drapes. V
Surgical
postopera
of healin
without re
Photo courte
Jackson, Miss

Basic technic When freshly "prepped" skin is dry, Vi-Hesive Adherant is sprayed on to an even pink tint from about 12" distance. Sterilized Vi-Drape Film is held taut over proposed operative area then smoothly molded by hand to site and wide adjacent skin area. Photo courtesy Ralph Adams, M.D.

Sealing off the contaminated colostomy or ileostomy, and yet having it visible while exploring a new operative field, is made possible by the application of Vi-Drape Film to the entire area. Photo courtesy of Robert M. Zollinger, M.D., William G. Pace, M.D. and Marjorie N. Reed, R.N., Columbus, Ohio

Visibility of landmarks, maintenance of asepsis in operative areas previously hard-to-drape, and isolation of the entire operative zone are particular surgical advantages of using Vi-Drape Film in neurosurgery. Illustrative is the draping of the cervical occipital area for laminectomy shown above. Photo courtesy Arthur B. Eisenbrey, M.D., Detroit, Mich.

Smooth molding and close adherence of the plastic skin drape to the difficult contour of the hip, provides an aseptic operative area previously considered almost impossible to achieve. Vi-Drape Film clings closely to the skin throughout long procedures. Photo courtesy Chas. G. Lovingood, M.D., Frank L. Shively, Jr., M.D. and Albert M. Storrs, M.D., Dayton, Ohio

Large areas can be sealed off for thoracic or cardiovascular surgery without hiding landmarks. Neck and shoulders are completely isolated from the incision. A cleaner, drier operative field is possible using plastic skin drapes. When Aeroplast Surgical Dressing is used postoperatively, evaluation of healing can be made without removing dressings. Photo courtesy Curtis P. Artz, M.D., Jackson, Miss.

Isolation of the anal area from the vaginal orifice during correction of prolapse of the vaginal vault avoids contamination by fecal extrusions.

Exteriorized vaginal vault is protected from contamination by plastic drape clinging closely to vaginal orifice during procedure and by isolation of the anus. Photos courtesy C. Paul Hodgkinson, M.D., Detroit, Mich.

To prevent trauma, desiccation and infection — Vi-Drape Film is frequently used as a protective wrap for exposed organs as shown above holding intestines during an aortic graft. Photo courtesy Chas. G. Lovingood, M.D., Frank L. Shively, Jr., M.D. and Albert M. Storrs, M.D., Dayton, Ohio

Would you like to see a full-color sound motion picture further illustrating the application of Vi-Drape Film in varied surgical procedures? The film, "A New Transparent Plastic Surgical Drape," produced by Robert M. Zollinger, M.D., William G. Pace, M.D. and Marjorie J. Reed, R.N., at Ohio State University Department of Surgery, is available for showing to all members of the surgical team.

Please send requests to:
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Station A—Box 1, Dayton 3, Ohio

Vi-Drape®Film, Vi-Hesive®Adherant-Pats.Pend.
Aeroplast® Dressing-U.S. Pat. No. 2,804,073

All photos shown are of actual procedures.

—Continued from page 38

Thus I think your correspondent should tell this fact to the hospital in which he is interested in continuing his training—and not concern himself about it any further until 6 months from the day he is to leave the country.

I hope that this will be of help to him and others in this situation.

JOHN G. HALL, M.D.
ATLANTA, GEORGIA

Forand Cost

If the Forand bill becomes law, what is the estimated cost for one year of operation?

S. R. TAYLOR, M.D.
ST. LOUIS, MO.

• *Many estimates have been made on the approximate cost of the so-called Forand bill for hospital care of the aged. Accepted by most experts as reasonable are the following: In the fiscal year 1960-61, the Forand bill would cost $900,000,000 for up to 60 days of hospitalization provided for all beneficiaries of the Old Age and Survivors Insurance program. In addition, there would be $14,000,000 for up to 120 days of skilled nursing home care, and another $80,000,000 for estimated surgical costs.*

Diller Dollar

I've tried a number of places to get an accurate answer to the following but I hit a dead end each time. Our house staff committee is trying to come up with a sensible proposal for a stipend increase. We want to base it on the increased cost of living—and the declining value in the dollar in terms of what it will purchase. We have all the figures for the worth of the dollar based on the 1947 dollar equal to 100 cents value. Do you know where we could find the present value of the dollar in terms of a 1900 dollar equal to 100 cents?

NAME WITHHELD
AT WRITER'S REQUEST
CHICAGO, ILL.

• *As of December 31, 1959 the dollar (1900 equal to 100 cents) was worth 28.8 cents. Source: U. S. Chamber of Commerce.*

How They Run . . .

Congratulations on your excellent series of articles on the various services by chief residents. Your last one ("How They Run Their Pediatric Services"—RP, January 1960) was extremely interesting to me since pediatrics is my specialty and I found many ideas of value that

—Concluded on page 48

—Concluded from page 44

we can utilize on our own service. Your journal is tops with the house staff at our hospital. Keep up the good work.

R. E. JOHNSON, M.D.
LOS ANGELES, CALIF.

Boards

"I Failed My Boards" (RP, January 1960) was a real stimulant to me. I needed someone to needle me into a planned program of study and your article did the job. I hope others derived the same spark in the direction of "Study Now, Relax Later!"

WILLIAM PETTIT, M.D.
NEW ORLEANS, LA.

• *From the letters received, the sparks generated by the article add up to a good-sized conflagration re study activity.*

Autopsy

Would you please send me one copy of the article "How To Get That Autopsy!" (RP, April 1959). Enclosed please find fifteen cents in coin to cover the costs. Please mail as soon as possible.

MRS. S. STATHAM, R.N.
JACKSON, MISS.

• *Your copy is on the way. We are almost out of reprints of this article. For the remainder, your orders will be accepted on first come, first served basis.*

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eases mental adjustment to menopause

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Editor's Page

"MIRAGE OF HEALTH"

An Editorial Book Review

Every now and then a book is published about the problem of health, which is illuminating because of the critical judgment of the author, his honesty in portraying the facts, his ability to evaluate health in terms of its social, political, ecological, scientific and medical implications, and, and this is very special, to project his own hopes and fears, and philosophy, into his discussions without seeming to pontificate on the subject of health.

Dr. Rene J. Dubos has done just this in his recent small volume entitled MIRAGE OF HEALTH, a book which should interest scientists, physicians, and medical students. Dr. Dubos is a member of the Rockefeller Institute for Medical Research and is widely known for his work in the field of microbiology.

In initiating his philosophical discussion of health, the author explores the origin of that eternal yearning of mankind for a return to the Golden Age, a time which in

---

Mirage of Health, Rene J. Dubos, New York, Harper, 1959, Pp. 236 (World perspectives, V. 22).

the lore of all people: strife, disease, and tensions did not exist and man lived on and on in a state of spiritual, ecological, biological, philosophical, and political harmony. That this yearning still exists is well evidenced by the overall drive recently by many nations for a "conference at the summit," in a hope that certain political, philosophical, ecological, and biological threats might be eliminated and at least the Sixties made Golden. However, realists are still skeptical that decisions if any, which may be taken at the "summit," will produce nothing more than the "gold-plated" Sixties.

Dr. Dubos then proceeds to discuss whether man in his development is progressing towards a Utopia. As health and well-being are major desirable items in any Arcadia, these states of man are carefully investigated, and Dr. Dubos trenchantly and repeatedly points out that while man believes that by his efforts in clean living, and by a proper application of an increasingly complex technology, ultimate health goals may be obtained, the actual fact is that we are spending enormous sums in an attempt to buy health without succeeding in our aims. Why! Because man is man, whose "striving for ever new distant goals makes his fate . . . unpredictable . . . As long as he continues to reach further into the unknown and to create for himself situations governed by parabiological values, problems of adaptation will endlessly arise. For him, certainly, fitness is more than a biological end; it is a state constantly to be modified and even sacrificed for the sake of new illusions and new goals."

The author delves deeply into the problems of the mutual adaptations of man and microbes. As he points out, "when a population—of plants, animals or men is exposed to a pathogen with which it has had no past experience, exposure may bring about severe disease in many of its individuals." However, adaptive changes are

quickly brought into play to bring about an equilibrium between the host and the infecting agent. From then on, the equilibrium is only disturbed by marked changes in the environment, nutrition or mood. Again and again, Dr. Dubos warns against assuming that modern technical advances are all-important in the gains which man has made against disease. As he points out, in the Western world, the effects of disease, as evidenced by death rates, have been decreasing since 1845. As he says, "The conquest of epidemic disease was in a large part the result of a campaign for pure food, pure water, and pure air based not on a scientific doctrine but on a philosophical faith." He discusses how faith in the magical power of drugs comes close at times to stimulating mass hysteria, and cites the use of the word "miracle" in conjunction with certain current drugs as evidence of this. He believes that the public (and many scientists) give too little thought to the enormous role played by the total environment in the type of diseases which are present in an area.

In his analysis of social patterns of health and diseases, Dr. Dubos suggests that "in the future . . . effective steps in prevention of disease may well be motivated by an emotional revolt against the inadequacies of the modern world and will result from the search for a formula of life more akin to the natural propensities of man." Certainly, all thinking people will agree that a new approach to this problem must be found in which there is distinct evidence that despite the expenditures of millions and millions of dollars each year on psychiatrists, mental hospitals, mental health programs and the ataraxics, one in four of us will be seen professionally by a psychiatrist.

The author has repeatedly commented upon the fact that the great savings in life have been accounted for by the marked decreases in infant and child mortality rates over the past century. The effect of this fact is "that

techniques have been worked out to permit survival of all children, and social, religious, and medical ethics demand that all be permitted to live, and reproduce their kind," brings all of humanity face to face with "a state of affairs which is without precedent in the biological world, and which bids fair to present new problems to medical and social sciences in a not too distant future."

In his final chapter on "Utopias and Human Goals," Dr. Dubos presents no final solutions to the problems he has outlined. He points out that Utopias imply a static situation, while as Sir Winston Churchill wrote, "Man has never sought tranquility alone, his nature drives him forward to fortunes which, for better or for worse, are different from those which it is in his power to pause and develop." The author himself feels that as "human goals which condition social changes profoundly affect the physical and mental well-being of man" these may, in the long run, bring disaster as far as the health and well-being of mankind are concerned. He believes we have reached the stage in our development when the social aspects of scientific discoveries must be seriously considered by scientists, because science is on the threshold of powers which are terrifying and threatening. One immediate example is the knowledge that drugs exist which permit one to control the will of an individual, and there is evidence that mass control of the will of a population is possible. The scientist must have the insight "to develop enough wisdom and humane understanding to recognize that the acquisition of knowledge is intricately interwoven with the pursuit of goals" and that "what is new is not necessarily good, and all changes even those apparently the most desirable are always brought with unpredictable consequences."

In closing, Dr. Dubos so realistically points out that "Man cannot hope to find another Paradise on earth,

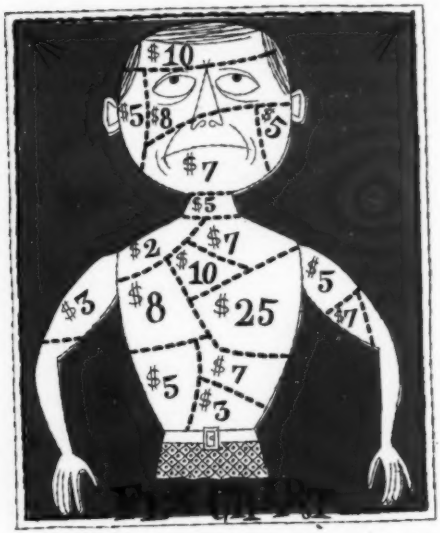
because Paradise is a static concept while human life is a dynamic process. Man can escape danger only by renouncing adventure, by abandoning that which has given to the human condition its unique character and genius among the rest of living things."

All scientists, physicians, students of science and medicine, and those emotional breeds known as political and social scientists should read and cogitate on the MIRAGE OF HEALTH. The facts, the truths, and the philosophy expressed in it have universal values, which must be understood and accounted for, if man as a "unique character and genius" is going to survive the pursuit of his own goals.

Perrin H. Long.

THE FEE:

What to Charge
How to Collect



Alan R. Sanders

The apprentice doctor has arranged, once he is on his own, for almost every contingency he is apt to meet in his first crucial year of practice. Yet, he is likely to overlook the one that means money in his pocket.

You've finished your residency. You've also decided whether to specialize or go into general practice, to solo or join a partnership or group, where to locate, whether to lease quarters or build.

But chances are you've avoided facing the complex question of what to charge—The Fee.

When you sit down to it, you'll see that there are many ways of assessing a fee, and many fees; that there are exceptions to whatever schedule you'll set up, that there's the question of credit and, finally, the sometimes grim matter of collecting what you have billed.

Unless you, a first-year practitioner, set up an equitable fee schedule, fair both to the patient and yourself, you may develop a vanishing or hostile practice and wreck an otherwise well organized opening year.

Some first principles about fees: Generally, you treat your patients alike.[1] This is the fair approach and, especially in the small community, the only practical one. (Word gets around about the exceptions you make, and you can all too quickly find yourself bargaining your way along.)

As for soaking the rich, this is inadvisable because they resent it and may drop you. Or they may spread the word that you're money-hungry. The rich, too, often have friends of moderate income who will be scared off by your high fees.

Exceptions

But there are exceptions to the all-like principle. The genuinely poor patient deserves your help. As a moral person, you should reduce his fee. But as an *intelligently* moral person you should thoroughly investigate his financial status and explain to him

that he is getting a reduced rate. His income may very well rise, and unless the low fee is explained to him he will resent a future higher fee.

You are also free to raise your fee for the chronic hypochondriac. Almost anything you do to get rid of the pest who likes to visit doctors is proper. The amorous female patient falls into the same category.

Having determined on all the above, how, then, is the fee to be set?

Approaches

There are various approaches to the fee schedule. One is to charge what your local competition charges, no more, no less. This means a great deal of sleuthing, since doctors do not always readily disclose these matters and medical society and insurance company reports cannot be completely accurate in regard to a local problem.

Another way is to charge on the basis of what your own special skill, experience and equipment are worth. Heavy training in your field or the purchase of modern, expensive tools of therapy are worth something extra. And, of course, what is the demand in the community? If you are the only specialist of your kind in the area, you are entitled to be paid for it. If there are a dozen like you—you may have chosen the location so your wife can be near her folks—you can't charge more than the others.

Setting fees

Once having determined your approach and evaluated your worth, you set your fees. You charge a certain amount per office visit, more for a home visit. You charge extra, if it is local policy or your equipment is very special, for EEG's, special injections, minor surgery.

You must pay your professional expenses and live reasonably well—that much is certain. If your fees are too low, you won't make a living, you'll rush through each patient without giving proper care and, such is human psychology, you'll plant the seed of doubt in your patients about the worth of a doctor who charges so little.

Just a word about the surgical fee schedule. Rates vary throughout the country for the various operations. But the California Medical Association[2] discovered in 1953 an interesting similarity, that the proportion of difference for operations tends to be the same. So, if you find that doctors in your area charge twice as much

for a gastrectomy as an appendectomy, and you don't like their rates, you are safe in setting your own, provided you keep the same proportion between the two.

Hourly rate

Before we go on to other questions, we cannot omit a new concept that has been introduced into fee scheduling. It is the hourly-rate basis of fees.[3] This means just what it says, that the doctor, like the analyst, charges for time spent. It has certain definite advantages.

The objections doctors have to charging per hour are not as strong as they once were. As to its commercial aspect, doctors are learning that patients understand and accept that the practice of medicine, like the writing of poetry or the taking of holy vows, has a bona fide economic aspect. Doctors, poets and clergymen must eat, and any fair and reasonable arrangement to aid them financially is not tainted. The objection that a pre-arranged fee prevents all-out therapy, if such is needed, is also raised. Obviously, fees can be altered when unusual circumstances arise.

To set an hourly rate that will give him his desired income, the doctor estimates what his annual income needs are and divides by the number of hours he intends to spend with his patients. This is to be differentiated from the total hours he works, for, if he includes time spent on office procedures, reading of x-rays, etc., his rate will be too low.

NEWS ROUNDS

Hospital Cuts Costs

It Can Be Done—The University of Illinois Research and Educational Hospitals reported on its first complete year of a special cost control program: Cost per patient day was cut 3%. Keys to program's success were a month to month check on spending and utilization, a quota system for nursing supplies, and close scrutiny of equipment requests. Areas not yielding to cost control: Lab services, drug, OR expenses and inhalation therapy.

Advantages

The hourly rate has these advantages. It allows the doctor to set a charge in advance for treatment of a disease. Knowing how long it has previously taken him to treat a specific disease, he can tell his patient how many visits and what cost to expect. The patient, of course, is gratified because it takes the mystery and fear out of his ailment. He is now dealing with something he can trace in its course.

And he can appreciate the doctor's bill if therapy fails because he has seen in advance that the doctor had a concrete plan and spent time on him.

For the experienced doctor the setting of a schedule is simple. He reviews his previous cases in each disease and determines average time spent and thus an average fee. The beginning doctor must make an estimate. He can adjust this after he has learned what his fees truly should be.

Critics of this method argue that doctors might greatly overestimate their required income and arrive at abnormally high hourly rates. Also, is it fair for the patient to pay according to an hourly rate when the doctor proves to be a long-winded, fussy, time-wasting individual?

As to credit,[4] the doctor is advised to rate his patients as to their likelihood to pay. This can be entered on their permanent office record, should be the result of serious investigation and will, of course, be adjusted as circumstances warrant. Depending on rating, requests for payment will range from none to firm.

Good indices that a patient has a sound credit rating are memberships in the Diners' Club, American Express, American Hotel Association and similar credit card organizations.

And now that difficult, many-sided problem of collection.

There are three avenues of approach with an uncollected bill. The doctor may attempt to collect in entirety, down to the final, bitter lawsuit, or may reduce or cancel.

Entirety

The doctor benefits by collecting in entirety by virtue of getting the money due him (if successful), and by showing the community that he is no fool, that he has offered honest services and means to be honestly rewarded. And he gains in his self-esteem by his forthright action. Drawbacks are that, conversely, it is expensive sometimes and time-consuming to collect and it may create ill will by establishing a

commercial reputation in the community.

The benefit of collection of a reduced bill is in the money collected that might otherwise be lost; the disadvantage is that rumor of reduction can affect future collections.

New Life

The benefit of cancellation is that a headache is, in a way, eliminated and the well-meaning debtor is given new life. Disadvantages are in the money lost, the possible reputation for the doctor as a weakling, the losing of many a patient who is too embarrassed to face his doctor.

The program of collection starts with the patient's first visit. The doctor, by his thorough explanation of the treatment and the cost, prepares his patient for the bill and thus psychologically eases the paying. Though the doctor explains therapy, it is the secretary who arranges the payments. A good secretary[5] can, by explanation, winning smile, regular notices and well-timed phone calls be worth a better-than-average salary.

The doctor can also help collections by keeping patient expenses down. He does this by emphasizing office rather than home visits, prescribing only the amount of drugs that the patient will need, charging reasonable fees.

In the case of hospitalization, the doctor explains that there are separate hospital, surgeon, anesthetist and possible "special" nurse costs. The patient con-

fronted by large expenses he did not expect is not likely to pay the doctor who did not warn him.

Nonpayment

Inability to pay is rare.[6] It is generally unwillingness based on the feeling that treatment was unnecessary or the doctor incompetent that brings on nonpayment. Where there is genuine poverty, or temporary financial difficulty, the doctor should, after investigation, be lenient in his demands or even contact a welfare agency for the patient's relief.[7] The doctor thereby does more than help pay a bill. He encourages the patient to face future medical care, not to shun it for financial disability.

Billing

The usual procedure in bill collecting[8] is to send out a polite note after 90 days reminding the patient that he has overlooked his bill. More frequent notes, firmer in tone, follow. A final warning that you will engage a collection agency is followed by doing just that. Empty threats backfire.

There are two kinds of agencies.[9] The private agency has trained collectors but may be harsh in its methods and thus harmful from a public relations viewpoint. The medical society collection agency emphasizes the gloved approach and charges somewhat less than the 40-50 percent of collections of the private agency.

It has been estimated that 4 percent of defalcations are cheats, 8-10 percent "shipwrecked" temporarily, 16 percent living beyond their means.[10] Conscientious patients prefer to pay up, the others respect the doctor who does not let them get away with it.

The low-fee, pay-when-you-please doctor loses money by the bucketful. In a discussion with a small-town doctor who, in false idealism considered it too crass to press his patients for payment, a management counselor discovered that the man had run up $34,000 on his books in four years. It is considered that unpaid bills should not be more than 5 percent of yearly intake or represent more than four months' work.

The hardest decision a collection-embarrassed doctor must face is whether to sue or not to sue. As a rule, he will not be contested. But he must, regardless, go into court with his office records complete and accurate, showing appointments, dates, services rendered. And he must face any possible reflection of

"hard-heartedness" in the knowledge that his intentions are good and will be so recognized.

A few warnings are in order. Do not sue the embittered patient with baleful eye who will go down fighting to his last borrowed penny—and talking about it for the rest of his life. Also, ascertain who it is that is legally liable when you sue. The law of responsibility involving wives, divorces and children is complex. And, by all means, before you sue find out what the statute of limitations is in your state for both *contracts* and *torts*.*

Simply, this means that if you sue before the statute of limitations for torts has expired, your patient will be sure to countersue for malpractice or negligence. And if you wait too long to sue you may find that not only the limitation for torts has expired but for contracts also, leaving you with a suit for collection of your fee that cannot be taken to court.

This is the story of the medical fee. Through inertia, a vague feeling of commercialism or a fear of consequences, many a doctor does not face up to the problems involved. For the beginning doctor, who must set standards of practice that he cannot change overnight, the fee is of particular importance and challenge.

To handle the problem forthrightly and intelligently is to release your energies for the therapeutic role to which your talents were originally dedicated.

* Tort: Any wrongful act (not involving a breach of contract) for which a civil action will lie.

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From a special conference on internship held at Michael Reese Hospital and Medical Center, your journal brings you this timely article by Dr. E. Hugh Luckey, a principal speaker. The addresses given at the conference by two other prominent medical educators will be presented in subsequent issues of Resident Physician.

Resident Physician is indebted to the administration and staff of Michael Reese Hospital for making this article possible.

THE FUTURE O

I think it is a fair statement that there is no other subject within the whole field of medical education that has wider interest, about which there is more controversy, than the internship. The over-all importance of this subject in medical education is well shown by the fact that in the last few years a variety of proposals have been made about the internship, including:

- The abolition of the internship.
- The extension of the internship to a former pattern of a two-year experience.
- The elimination of the internship in all university hospitals.
- The elimination of the straight internship and in certain circumstances, the elimination of the rotating internship.

In starting out, I would like to make it quite clear that I am a prejudiced individual in regard

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OF THE INTERNSHIP

E. Hugh Luckey, M.D.

to this matter. It won't take long for you to see that. I am prejudiced because of my own personal experiences, as we always are, in that my graduate training consisted of a straight internship.

Secondly, I speak from experience in the direct supervision of two different internship programs in different hospitals, both of which centered around the straight internship, but one of which included a mixed internship.

Next, I want it to be quite clear that this is a *personal* prejudice. Any of you who know that I am chairman of the Committee on Internship and Residents of the American Association of Medical Colleges should know that my remarks in no sense reflect the position of this committee, nor of the Association of American Medical Colleges. What follows certainly is not a reflection of conclusions from current studies directed by Dr. Saunders.

It would be helpful if we looked at the anatomy of the internship or graduate medical education in the United States as it has evolved over a period of some 50-odd years. Let's recall that the graduate medical educational programs in our country date back to the time of the initiation of the first hospital. The men who were responsible for founding our first hospitals had their training in Edinburgh or London; consequently, the early developments of hospital programs reflected the trends in those countries. It is apparent that as far back as 1617, in Scotland and in England, there were

Dr. Luckey is professor and chairman, Department of Medicine, Cornell University Medical College; physician-in-chief, New York Hospital, Cornell Medical Center, and chairman, Committee on Internship and Residents, Association of American Medical Colleges.

people we would call today house officers. Their responsibilities were very slight, but in fact they had roles in the hospital that were quite similar to those of externs and interns today.

In Philadelphia in 1751, the Pennsylvania Hospital opened with "house officers." Their responsibilities were varied, and it is really quite difficult to be sure whether those house officers correspond to what we would call interns today or externs, or even junior attending physicians.

For purposes of review I have gone to three sources: first, to the excellent historical reviews of Dr. J . A. Curran, and to the 1940 issue of the report of the New York Council on Internship and Residency. Second, to a recent paper by Dr. Curran in the September 1959 issue of the Journal of Medical Education, which is an excellent review, and third, to the history of internships and residencies in the two hospitals with which I have been associated in New York, Bellevue Hospital and New York Hospital.

So far as I can tell, the first use of the term "resident" in this country dates to the so-called "residentiary assistants" appointed at New York Hospital in 1793. Because 600 patients had been admitted to the newly-opened hospital, it was necessary to appoint a physician who stayed in the hospital all the time. He was called a residentiary assistant. The following year he was called a residentiary surgical assistant. And, since it was impossible for an individual with special preferences for surgery to carry out all the responsibilities in the hospital a residentiary assistant in medicine was soon appointed.

Responsibility

As one reviews the defined responsibilities of these men, it is quite clear that they functioned in roles that we would consider those of straight interns today, with a few exceptions. The residentiary assistant in medicine not only had the responsibility for the general supervision of the medical patients in the hospital, he also functioned as the apothecary of the hospital, and was responsible for the library, for checking out books, and had to give a bond that all these books would be returned. In addition, he shared with the residentiary surgical assistant the responsibility and function of male midwife (a strange term) on alternate nights.

These men usually had no more than two years of what might be considered medical training. They served the physi-

cian or surgeon. They attended a series of lectures and might or might not have served in the role of an extern.

Walkers

Shortly after that the terms "junior walker" and "senior walker" reached the scene. A "junior walker" was an extern; a "senior walker" was an intern. And then the terms "house physician" and "house surgeon" were introduced.

In Bellevue Hospital there is no record of "house staff" until about 1806. At that time, starting in 1806, the house physicians and house surgeons were appointed. Then something strange happened in the development of graduate training at Bellevue. In about 1826 it was decided to appoint what they called a "physician-in-chief." He was really the resident physician, and under this physician-in-chief men served both in internship and in medical and surgical responsibilities.

In effect, what happened at Bellevue apparently was the beginning of straight graduate training programs, and then the evolution to a rotating program. From 1826 to 1850 this rotating program of house staff training was in effect. Then about 1850 the return to house physician and house surgeon system occurred.

There is no need for me to go into greater detail about some of these aspects but I would like to mention that one of the great troubles, it seems to me, has been in the terminology used. The term "internship" was used in Bellevue Hospital from about 1850 on, but applied to a quite different situation. It was a term which referred to the whole period of graduate training. A person might serve as house physician or house surgeon during one year of his entire tenure as intern in the hospital. This was a reflection of the French system, in which the intern was really the "most senior" man on the house staff, and a very prized post.

I think we can gain a number of lessons about the situation in which we find ourselves in graduate training today by looking at the past. We have gone through a number of evolutionary changes in the history of the development of our internship programs in this country.

My theme today is one we have failed — in graduate medical training — to keep abreast of; changes in undergraduate education, and the progress in the delivery of medical services to the people. The programming, first has been grossly inadequate,

and, secondly, there is a clear conflict between education and service in the internship.

Straight

In the 12,000 internships that we have, only 11% are straight; some 87% are classified as rotating; and then 1% are classified as mixed. I recognize there is an inaccuracy because some under "straight" are mixed, and many under "rotating" are actually mixed. But for purpose of discussion it should be pointed out that the number representing straight internships is very small.

Roughly, 37% of all the internships offered are the responsibility of affiliated medical schools. Most of the straight internships that are offered are centered in university teaching hospitals. A considerable percentage of the rotating ones are also in these university hospitals.

It should be pointed out, before talk about straight internships gets too widespread, that it would be impossible today to convert all internships into straight internships.

In at least 14 states there is legislation, or rules fortifying legislation, requiring a certain kind of experience—or internship—in the first year after graduation from medical school.

This introduces special problems because we cannot act independently of the other group in our society which is responsible for deciding whether a man can or can't practice medicine: the medical licensing board in the state.

Now, one question comes up every time internship is discussed: Does a straight or a rotating service offer the greatest advantage? For many years it has been pointed out that there is great need for flexibility in planning, and for a freedom on the part of institutions to provide the kind of program best suited to their needs during the first year after graduation. Although this idea has served fairly well, it has also led to the complex situation in which "internships" today may mean one of at least a dozen things.

One of the most provoking remarks that a prominent physician or a prominent educator can make is, "I think the internship should be eliminated." Nobody knows what he means. I think we should qualify this. Are we talking about a rotating internship or a straight, or a special kind of program?

We all recognize that we are never going to eliminate the first year after graduation from medi-

cal school. It is simply a matter of defining the relationship between medical school experience and graduate experience, and putting on paper, or in programs, the kind of graduated stages of responsibility that will best suit the needs of an individual for progressive experience and responsibility — going from the clinical experiences of medical school into graduate training.

The real problem in the rotating internship, of course, is the problem of conflict with the well developed undergraduate clerkship. It is recalled that the rotating internship was developed, in its modern day form anyway, at a time before there was an effective undergraduate clinical clerkship. As a result, as the clerkship developed, a real conflict occurred between clerkship experience and the rotating internship experience.

Frankly, I don't know how one can eliminate this conflict, because during the rapidly rotating internship program, men are not settled long enough in a service to be given responsibilities that would allow them to fill a different role from that of the undergraduate clerk. This is a problem I am sure some of the other speakers will touch on in the course of our discussion.

Setting

The problem of the straight internship is a little different. First, it requires a setting in which there is a residency training program in order to be effectual. Of course, a first year of a straight internship is really the same thing as a first year of a residency in medicine. I think it is quite a fair question to ask whether or not the rotating internship should be present in a system where a well developed residency training program and clinical clerkships are present. I hope the other two speakers will comment on this.

The problem of an adequate number of interns had plagued us; for example, New York City has 5,198 house staff in approved programs, approximately 10% of the internships in the country. Of this number, 50% are graduates of our schools in this country and in Canada, and 50% are from foreign schools. Of the foreign-trained group, the largest number, of course, is made up of aliens on exchange visas.

In the nation, the Hospital Council of New York estimates that approximately 30% of all of the house staff physicians are men trained in foreign schools. Of the 30%, 20% represents aliens on visas, nearly 10% rep-

resents permanent immigrants, and 3% are U.S. citizens trained abroad.

Number problem

So this problem of the number to meet service requirements in U.S. hospitals has been solved partially, and many would say quite unsatisfactorily, by the *utilization*—and I use that term purposely—the utilization of men who are graduates of foreign schools. And I think all of us would admit, with rare exceptions, that the foreign graduate represents in general a second type of medically trained individual in this country.

We can't get away from the internship problem without mentioning this matter of numbers, for there is an increasing cry for more and more men in internship programs all over the country. It should be recalled though that 85% of all the hospitals in the country have no internship or resident programs. It seems quite likely that even a greater number are going to have to do without such programs.

Now, what are we going to do about this matter?

Well, perhaps Dr. Johnson and Dr. Saunders will provide us with some answers. I have a number of suggestions. First, I feel quite frankly that we should do away with the term "internship." It serves no useful purpose and it has confused our discussions in graduate medical education now for a long time.

Secondly, I think it is inevitable that a different kind of first year program is going to have to be developed. I personally feel that this is going to be a program which will be a compromise between straight internships in medicine and pediatrics, and rotating internship. I think we might in our present terminology, call this a mixed program.

GP program

Frankly, I think that the program recommended by the A.M.A. committee on Preparation for General Practice, would be an excellent first two years of training, regardless of whether an individual were going into general family practice, or into a specialty program in internal medicine or pediatrics.

Briefly, the program designed by this committee consists of a period of approximately eighteen months in medicine and pediatrics and psychiatry, including outpatient work; a period of experience in emergency rooms, allowing minor surgery

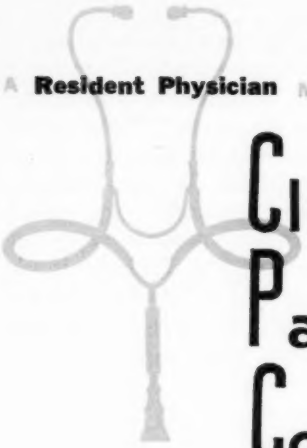
experience and initial contact with trauma; and a six-month elective period which could be used in some instances for briéf obstetrical training.

I think this kind of program could be modified for use in practically any specialty, except for the individual who has the commitment to go into a residency training program in surgery, or a specialized obstetrics program. Under those circumstances, it seems entirely reasonable to allow such an individual to go directly into his residency training program in a straight internship in this field at the very beginning. It would be ideal if a year of such a general experience were available first, but I think this is asking too much in the face of a five, six or seven year training program in surgery.

NEXT MONTH

Dr. Victor Johnson,
Director, Mayo Foundation,
Member, Internship Committee, A.M.A.,
will discuss "The Future of the Internship."

A **Resident Physician** MONTHLY FEATURE



Clinical Pathological Conference

Ochsner Foundation Hospital

CL. #211190, PATH. #S-58-3570
CHIEF COMPLAINT: RECURRENT "COLDS."
ADM: 8/5/58 DIS: 8/27/58

A 46-year-old white male Catholic priest was referred to Ochsner Clinic on 8/5/58, from Panama, with a diagnosis of "tumor of the left hilus."

Present Illness: Patient dated his present illness to March—May 1958, when on a trip to Europe he developed two consecutive "colds," characterized by paroxysms of coughing and a running nose. He had no fever. These episodes lasted longer than the usual ones he had had in the past. In late May 1958, he developed another "cold," and in mid-June, after spraying insecticide in his room, he developed oppressive pains in his chest along with slight wheezing. He consulted the local doctor, who took a chest x-ray and found a mass in the left hilus. He was given an expectorant and an antibiotic. Two

weeks later another chest x-ray was taken and showed no change in the appearance of the radiologic density. He was bronchoscoped and no definite conclusions were drawn.

The chief symptoms upon being seen here were: sporadic left chest pain, occasional wheezing, nonproductive cough, mild weakness and shortness of breath. No night sweats or fever.

Past history

Past history revealed a five-pound weight loss in two months but was otherwise not remarkable. Family history and occupational history were non-contributory. Patient does not smoke. Review of systems revealed no additional or contributory information.

Physical examination

Physical examination revealed a well developed, well nourished, hypersthenic, 46-year-old white male in no apparent distress. Blood pressure 122/82, respirations 20, pulse 80, temperature 98.6°, height 67 inches, weight 179 pounds.

The only pertinent positive findings on physical examination were inconstant wheezes to auscultation of the left lung base and hyperplasia of the gums. The patient was admitted to Ochsner Foundation Hospital on 8/7/58, for further workup.

Laboratory findings

Skin tests for histoplasmin, coccidioidin, and blastomycin were negative. A left scalene node biopsy was negative. Tuberculin test (O.T.), was positive. EKG was normal. Hemoglobin, 14.5; hematocrit, 45%; WBC, 10,250. Sed. rate was 10. Stools were negative. Blood glucose, BUN, Calcium, phosphorus, protein, AG ratio, were within normal limits. Sputum was negative for malignant cells.

X-ray examination

EPA of the chest on 8/8/58, in inspiration and expiration with lateral view reported "there is a circumscribed, nodular density arising from the left hilus and measuring 5 cm. in diameter. This contains no definite calcification. On the right, there is an 8 mm. rounded nodule in the third anterior intercostal space. Lungs were otherwise clear. No evidence of obstruction secondary to hilar mass."

Barium swallow 8/8/58, "no esophageal involvement or abnormality." Impression: "left hilar mass and small nodule in right upper lung field. Tumor

should be first consideration; if both are tumors, then the bilateral involvement should suggest metastatic disease. Suspect primary site is left hilus. Bronchoscopy and bronchography should be necessary."

Bronchoscopy was reported as normal.

Angiogram was reported as "the hilar vessels are not involved by the mass and the primary diagnosis must remain bronchogenic carcinoma."

Pulmonary function

"Ventilatory aspect of pulmonary function is relatively good with a vital capacity of 95% of predicted, and a maximild restrictive insufficiency in mum breathing capacity 90% of predicted. This may indicate a addition to a slightly greater, though still mild obstructive factor.

Combined spirometry in supine position shows an inspiratory reserve volume of only 67% of vital capacity, which would suggest elevated pulmonary midposition and strengthen the feeling of some obstructive ventilatory insufficiency.

The respiratory aspect of pulmonary function was studied using brachial artery blood taken at rest. The oxygen tension was only 74 mm. while carbon dioxide tensions was 38 and pH was 7.41. The low oxygen tension may possibly be due to an obstructive lesion of the left lung, giving poor ventilation of that side. Also could be due to diffusion block, perfusion abnormality, or AV shunt.

In view of a normal diffusion capacity of carbon monoxide of 18.5 cc per minute per mm. of mercury, and relatively normal ventilation, a shunt is probably present and may well be found in the left hilar region where a mass is described. This is also a stronger possibility in view of the fact that the patient is a non-smoker."

COURSE: A left pneumonectomy was done on August 18, 1958; postoperative course was uneventful and the patient was discharged on August 27, 1958.

Discussion

DR. HURST B. HATCH (*Pulmonary Physiology Laboratory, Department of Medicine*): The case under discussion is a 46-year-old white male, a Catholic priest, who entered the Ochsner Foundation Hospital on August 5, 1958, with a chief complaint of recurrent colds. He was referred from Panama with a diagnosis of a tumor, left hilus.

He dated his present illness to March 1958, when on a trip to Europe he developed two consecutive colds, characterized by paroxysms of coughing and a running nose. He had no fever. These episodes lasted longer than usual in duration than colds in the past.

He had had a five pound weight loss in two months, and other than this, history was not remarkable. He did not smoke.

Radiology

Dr. Buchtel has the x-rays available.

DR. BUELL C. BUCHTEL (*Department of Radiology*): Films made previously at another institution had revealed a mass in the region of the left hilus and for this reason, our initial roentgenograms included P. A. projections made in inspiration and expiration. The mass in the left hilus is clearly evident on both of these films. There is also a small nodular shadow on the right at the level of the anterior end of the fourth rib which may or may not be related to the other mass lesion.

The tumor in the left hilus is rather smooth in outline and we see no definite calcification within it. In comparing the PA views, we see that the lung fields are equally aerated and there is no evidence of bronchial obstruction with trapping of air or obstructive collapse distal to the hilar mass.

In the lateral view the hilar density is well demarcated. There is also a vague density in the basilar portion of the left lung along the diaphragmatic surface, the original report of the examination makes no mention of this shadow (Figs. 1 and 2).

About a week following the initial film study, an angiocardiogram was performed. We have two films in the series, the first of which shows filling of the superior vena cava and the chambers of the right heart. Here, we see the outflow tract with opacification of the pulmonary artery. The peripheral divisions extending into the lower lobe are also filled and in the region of the left hilus, we see no apparent connection of the vascular structures with the mass.

A second film shows additional filling of the more peripheral portions of the pulmonary arteries and again the mass is separate from the left pulmonary artery and the proximal branches of this vessel. In summary, we have a mass lesion involving the left hilus, another smaller nodular shadow in the right upper lung field and a questionable opacity

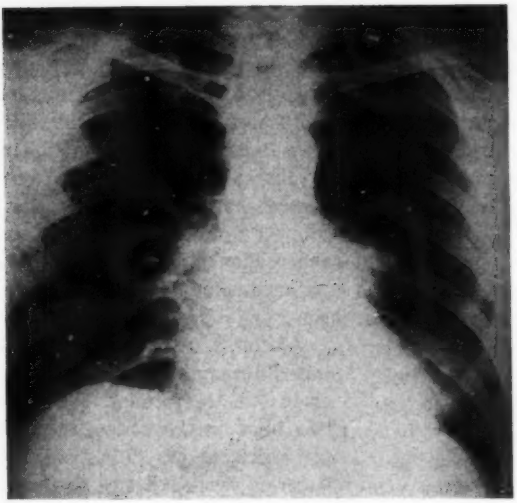


Fig. 1. P A of chest. Note mass in left hilar area and questionable capacity involving left lower lobe.

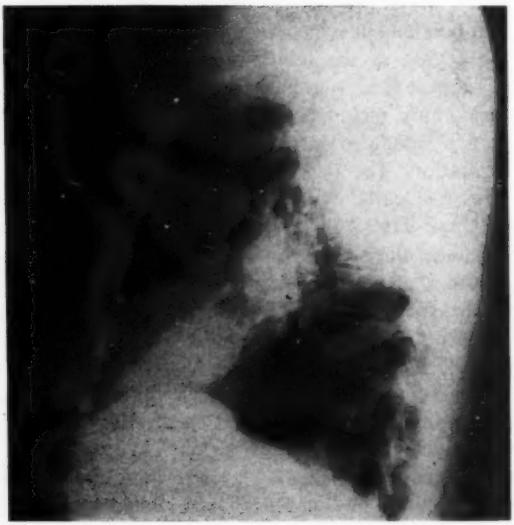


Fig. 2. Lateral view showing well demarcated hilar density.

involving the left lower lobe along the diaphragmatic surface.

Obstruction

DR. HATCH: Now up to this point in the development of the patient's history and physical and laboratory findings, we have the finding of a rather large, but smooth, mass in the left hilus without evidence grossly of obstruction, but on physical examination, the presence of wheezes indicated that there must be some obstruction. Normally, the bronchus will dilate on inspiration, and on expiration will get smaller, and if the mass is encroaching, either extrinsically or intrinsically, wheezes will be produced predominantly on expiration during the earlier stage of obstruction.

Arterial blood

In our laboratory approximately 70-75% of patients with bronchogenic carcinoma will have a positive sputa for tumor cells, and when we obtain a negative, we feel we have a fairly effective screen for malignancy.

In a man this age, our first consideration was bronchogenic carcinoma. As is routine in this institution, and we have data to support it, routine studies of lung function should precede any contemplated thoracotomy. I have the values here and we can say very definitely that from the standpoint of ventilation or of the movement of air in and out of the lung, this patient had perfectly normal ventilation.

There was no evidence of airway obstruction, nor was there any evidence of loss of elasticity of the lung tissue, and we felt that from the standpoint of the mechanics of lung function, this patient was perfectly normal.

However, when we obtained an arterial blood from the brachial artery, at rest, we were quite surprised to find that the patient had a low oxygen tension of 74 mm. of mercury. The pCO_2, or partial pressure of carbon dioxide, and pH were normal.

Hypoventilation

When we have a patient who has hypoxia, there are several things which we consider. First of all, we must realize that there is no human being who possesses perfectly normal ventilation of alveoli or perfectly normal blood flow of alveoli. The perfect case of normal ventilation, normal blood flow does not exist in any patient. When a patient presents, as did this particular patient, with hypoxia, with perfectly normal ventilation, the abnormality must

be in some phase of the respiratory aspect of pulmonary function, that being the phase of physiochemical exchange of gases.

One abnormality is alveolar hypoventilation. This has received a lot of comment in the literature recently, an example being the hypoventilation syndrome of obesity, or Pickwickian syndrome; this is noted by hypoxia, CO_2 retention and acidosis.

The findings of hypoventilation syndrome occurs in other diseases besides obesity, for instance, encephalitis and polio.

The normal pCO_2 and pH would rule out hypoventilation as a basis of this patient's difficulty.

Diffusion block

The next abnormality is a diffusion block. This has been described in various diseases, particularly berylliosis. These patients have normal ventilation, but due to an abnormality of the alveolar membrane or the septa, oxygen cannot be exchanged adequately.

Now, another cause of hypoxia is poor ventilation with uniform flow. This is an exaggeration then of what is a normal person's function. This is the classical finding in a patient, for instance, with obstructive emphysema in which there is a greater majority of alveoli which are being poorly ventilated.

In view of normal ventilation, we certainly cannot make a diagnosis of an abnormal type of finding as you see in emphysema. After giving the patient 100% oxygen we found that he did not reach a normally saturated arterial blood. We calculated his venous admixture and it was elevated 14%, with the normal being 8%.

He had normal alveolar ventilation and his physiological dead space was normal as well.

Shunt

This brings us to the final abnormality and that is an anatomical right to left shunt, such as an A.V. fistula of the lung.

Now, there are various types of fistulae. They can be systemic to pulmonary artery; they can be pulmonary artery to vein. This would have to be one in which venous blood was shunted right to left within the pulmonary parenchyma.

We cannot effectively, as you noticed here, rule out an anatomical defect within the heart with a right to left shunt. We felt the heart examination was perfectly normal and the EKG was normal. There was no evidence

of any right ventricular abnormality. We felt fairly confident from that standpoint that we had no intracardiac lesion.

There are numerous possibilities, of course. He did not have the classical findings of Rendu-Osler-Weber's disease or congenital telangiectasis in which there are multiple A.V. fistulas of the lung; they characteristically have clubbing, are grossly cyanotic, will have telangiectatic areas in the mouth and nose and have had nosebleeds frequently. This patient had none of the connotations of that syndrome.

So we felt that the most likely was a fistula communication within the lung which we could not demonstrate on angiography to our satisfaction, but we felt very definitely that he did have an anomaly within the lung, a vascular type and were not convinced at the time of thoracotomy that the lesion in the left hilus did not represent the vascular anomaly, per se.

Thoracotomy

The other point considered, and I think certainly demanded that this patient have a thoracotomy, is the fact that this mass was present in this patient; even if it were vascular, it could possibly give him a significant amount of difficulty in the future.

We certainly considered very strongly the diagnosis of bronchogenic carcinoma. It is certainly located by x-ray within the inner third of the lung, the more common place for carcinoma. His age group means nothing to us anymore in the differential diagnosis of carcinoma, and I am sure Dr. Ochsner feels his smoking history being negative mitigated against that diagnosis to some degree.

Now the lesion in the opposite lung, we felt, was granuloma. I felt that it had calcium in concentric layers.

Unilateral lesion

In a unilateral lesion there are several diseases which you should consider. I will not go through all of them, but I think there are three or four which should be considered. One is tuberculosis.

We have seen here certainly two cases that I shall never forget, patients who have presented with unilateral hilar enlargement, as a result of their primary infectious tuberculosis. One was in his twenties and one in his middle thirties. One had a negative tuberculin and one a positive. The occurrence of the primary complex, if you watch for it is not too uncommon. You rarely

see the parenchymal disease of the primary disease of tuberculosis, but the hilar lymphadenopathy may last for as long as six months.

You would expect that the tuberculin would become positive, as most studies have shown, when the hilar nodes become enlarged, and the O.T. being positive in this patient would make you seriously consider this, although it is unusual in this age group.

Boeck's sarcoid

Another possibility would be Boeck's sarcoid, certainly some 5 to 10% of patients will present with unilateral hilar enlargement. He had no other nodes palpable. That was pretty well ruled out, in my opinion, when we obtained a negative scalene node biopsy, since in our experience and in other's experience, a scalene node biopsy is one of the most productive techniques for diagnosing sarcoid.

Hodgkin's disease

Another possibility, of course, would be Hodgkin's disease. It is more commonly bilateral. There were no other nodes palpable. He had no fever. We could not find any other evidence of Hodgkin's, but it must be considered.

Finally, any benign neoplasm of the lung must be considered. I can truthfully say this diagnosis was not considered strongly by me at the time I saw this patient prior to thoracotomy. My original feeling was that this may entirely represent a vascular lesion in addition to a mitotic lesion of the left lung.

Cancer unlikely

DR. ALTON OCHSNER (*Department of Surgery*): The clinical diagnosis in this case consisted of several possibilities. Because he had not been a smoker, I felt that bronchogenic cancer was unlikely. In fact, I am of the opinion that smoking is one of the most important diagnostic phenomena that we have in making a diagnosis of cancer of the lung and if the patient is not a heavy smoker, the burden of proof is certainly upon the clinician to make a diagnosis of this lesion.

The preoperative diagnosis was a neoplasm of the lung, probably benign, and an arteriovenous fistula was definitely considered because of the pulmonary function studies, which Dr. Hatch described.

At the time of the operation which was done through a posterior lateral incision, we found

that the upper lobe seemed to be completely airless. There was a hard mass involving the inferior medial portion of this lobe which felt like a neoplasm. There was no evident increased vascularity.

Pneumonectomy

Extending from the lower lobe and attached to the diaphragm was a segment of the lung which looked different from the rest of the lung in that it was pink but apparently was not air containing.

As we dissected this away from the diaphragm, there was a fairly good sized artery which apparently came directly from the aorta and went into this portion of the lower lobe. At first, we decided to do only a lobectomy, but as the hilar dissection was being done it was found that the branch of the pulmonary artery supplying the lower lobe was so close to the tumor that it was impossible to separate it from the tumor and it was, therefore, decided to do a pneumonectomy.

The pulmonary artery and pulmonary veins were separately isolated, ligated, transfixed and divided. The bronchus was dissected up to the bifurcation and bronchial clamps were applied following which the bronchus was divided. The bronchial stump was closed with interrupted crochet cotton sutures and covered with a pleural flap.

The finding of the artery originating from the aorta and going to a portion of the lower lobe and supplying a segment of lung which appeared to contain no air but was pinker than the rest of the lung, is pathognomonic of sequestration of the lobe.

There is some difference of opinion why these lobes become sequestrated. Most of them have no communication with the bronchial tree as in this case. The principal finding is that they receive their blood supply directly from the aorta and the British surgeon Pryor is of the opinion that the vascular remnant of the aorta is the factor which is responsible for its development.

Others believe that the lobe becomes sequestrated first and subsequently a new vascular supply develops. Probably the former explanation is the correct one.

Almost without exception, it is the lower lobe which is involved although rarely the upper lobe may be involved. In most of the reported cases, it is the lower lobe on the left side, as in this case, which is the site of involvement. These lesions are very frequently associated with diaphragmatic defects. At times

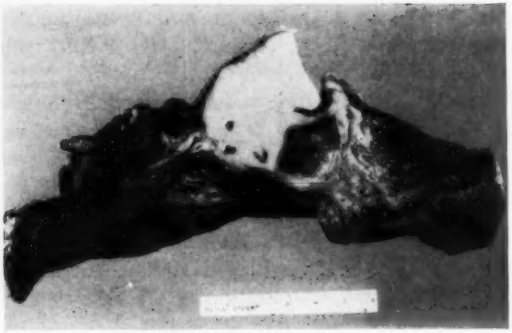


Fig. 3. Cut surface of gross specimen showing size and appearance of bronchial adenoma.

complications, such as cyst formation, bronchiectasis and infection, occur and for this reason the removal of these lobes is justified.

Recognition

It is important that the condition be recognized at the time of operation because of the anomalous blood supply and, unless it is recognized, a fatality may occur. In fact, I had one (one of my very early cases) over 25 years ago. I had secured all the hilar structures and was dividing the inferior pulmonary ligament, where the anomalous vessels are usually located, and a massive hemorrhage resulted. Because the patient had already been subjected to the long procedure, he succumbed before the bleeding could be controlled.

We were unable to get an autopsy but I am quite sure that he had a sequestrated lower lobe with an anomalous vessel from the aorta which caused his hemorrhage.

In some cases, the origin of the vessel is from the abdominal aorta which courses upward through the diaphragm in the notch produced by the aorta or may even come up through an independent aperture in the diaphragm to supply the sequestrated lobe.

Sequestration of the lobe is a rare disease, representing only about 2% of the parenchymal lesions of the lung which are operated upon.

After removal of the lung, a tentative diagnosis was given to us, on frozen section, of bronchial adenoma which was sub-

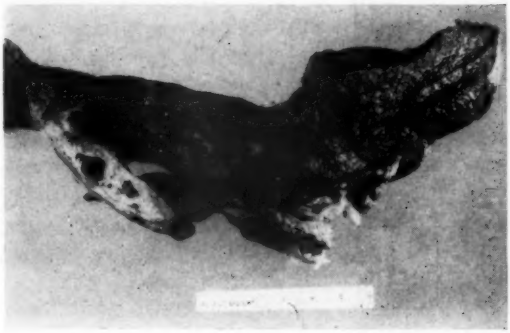


Fig. 4. Cut surface of gross specimen showing sequestrated lobe attached to base of lower lobe (left side of picture). Note cystic dilatation of bronchi and anthracotic lymph nodes within the sequestrated lobe.

sequently proved on permanent section.

Large mass

DR. G. M. CARRERA (*Department of Pathology*): Thank you, Dr. Hatch, Dr. Buchtel and Dr. Ochsner. The specimen consisted of the left lung and I have some photographs that will better illustrate the findings. The lung (Figs. 3 and 4) weighed about 450 gm., and located near the hilus was this large mass which, as you can see, is a yellowish color. On cut surface it is smooth.

It was impinging upon the upper lobe bronchus primarily, but was a very short distance from the main bronchus to the left lung. I believe that the clearance here is about 1.5 cm. In addition to the hilar mass, there was the lesion in the basilar portion of the lower lobe and as you can see, it consists of a portion of tissue, roughly 6.0 x 5.0 x 2.0 cm. in main dimensions and which was attached to the base of the lung by dense fibrous adhesions, but one could see a cleavage between this mass and the main pulmonary parenchyma.

This mass was not aerated, and at the attachment of this mass to the diaphragm where the surgeon severed the connection, one could see not one, but two, relatively large, arterial trunks. One of them, the larger, measured as much as 3 mm. in external diameter.

The arteries were muscular and definitely of peripheral type.

It has been reported that many cases of sequestrated lobe have a blood supply which is equivalent in size to that of the celiac

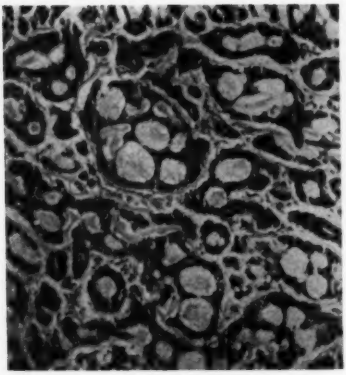


Fig. 5. Photomicrograph of typical area of the bronchial adenoma showing cylindromatous pattern (H & E 100X).

axis, and that explains the tremendous hemorrhage which can occur in those cases, as explained by Dr. Ochsner. After the specimen was fixed, we could, of course, examine this mass much better.

The bronchial adenoma was very large and, as you can see, it projected into the main upper lobe bronchus. Here is the intrabronchial component, while the larger portion was extrabronchial. This is not unusual, actually it happens in the majority of cases. An interesting finding is that even grossly, one could see evidence of lymphatic involvement. Here is is an anthracotic lymph node, obviously almost completely replaced by neoplasia.

Sequestrated lobe

Looking at the specimen from the other side, you have here a very good view of the sequestrated lobe. On section, it contained several large cystic areas filled with clear, gelatinous material. This is the usual finding and represents inspissated bronchial secretion within cystically dilated bronchi.

Now, the venous return, as inferred by Dr. Hatch's pulmonary function studies, must have been through the pulmonary vein, and hence into the left side of the heart. I know that in the literature there has been some argument as to how the blood supply empties from the arterial connections in sequestrated lobes.

Some authors claim that it goes into the pulmonary artery, while others claim it goes into the pulmonary veins. I believe that this one must have gone into the pulmonary veins. Dissection of these specimens is extremely difficult and one cannot very often prove anatomically such connections.

Here is the histology of the bronchial adenoma (Figs. 5, 6, and 7), and we classified this one as of the cylindroid type. As you know, the term bronchial adenoma is really a misnomer. They are neoplasms of low malig-

nancy. Their evolution is slow, but they will continue growing and penetrate the regional or hilar nodes and in some instances, there are distant metastases.

If an adnenoma is incompletely excised, it may take years before a clinically evident recurrence is present, and eventually the hilar nodes become involved.

Cylindroid

Of the two types of bronchial adenomas, the carcinoid type and the cylindroid type, the cylindroid type is the most invasive, and in this case is a classical example of the cylindroid type of bronchial adenoma. It mimics in many instances, the so-called "adenocystic basal cell carcinoma" which is exemplified by the right portion of the field in this view and throughout this field, the lesion is quite typical of cylindromatous bronchial adenoma. The cells are small, the nuclei hyperchromatic, and they are arranged in those alveolar formations and the material within the lumen of those atypical glandular structures stains for mucicarmine, indicating that it is actually mucoid secretion from those cells.

The tumor invades to the very edge of the bronchial mucosa in some areas. The tumor is actually invading the peribronchial lym-

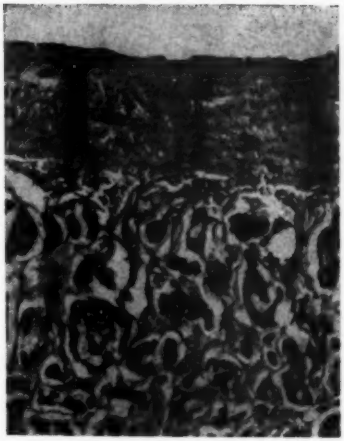


Fig. 6. The neoplasm is invading the perivascular spaces of a large branch of a pulmonary vein (H & E 100X).

Fig. 7. Invasion of the perichondrium of a bronchial cartilage by neoplastic cells. Notice variation in pattern in the tumor in this figure as compared to figures 5 and 6 (H & E 100X).

phatics. Here is another area in which the tumor is invading the pulmonary parenchyma and as you can see, it is not encapsulated.

In this photograph, you can see the tumor invading the perichondrium.

Actually, the perichondrium has been destroyed and the tumor is invading the bronchial cartilage.

QUESTION: Isn't is unusual for bronchoscopy to be negative?

DR. HATCH: It certainly is. Most cases of bronchial adenoma and particularly endobronchial disease lesion that this patient had would, I think, be recognized.

Central lesion

Unfortunately, it was not visible at the time of bronchoscopy. But bronchoscopy is a very valuable adjunct to the diagnosis of bronchial adenoma, since they very rarely occur peripherally. They are central lesions.

I think one thing should be explained—when you say that the systemic artery emptied into the sequestered segment and yet we had hypoxia; this is explained by the fact that oxygen is given up to that sequestered lobe and is collected into the pulmonary venous system. It is not arterial blood any longer. It has given up some of its oxygen through this capillary bed and is therefore, approaching venous blood to give us the low O_2 tension which we obtained from the brachial artery.

Lobectomy

QUESTION: Dr. Ochsner, if this case did not have a sequestrated lobe, too, would you have attempted a lobectomy?

DR. OCHSNER: As I stated, we attempted to do a lobectomy but, because the branch of the pulmonary artery supplying the lower lobe would have been compromised because of the proximity of the tumor to it, the only feasible procedure that we could do was a pneumonectomy.

There is considerable controversy as to the best way to treat bronchial adenoma, although I believe there is less controversy now than there was up to 5 or 10 years ago. In the early experience of the Association for Thoracic Surgery, there was almost an annual fight between bronchosopists and surgeons concerning the best method of treating bronchial adenomas.

The bronchoscopists always maintained they should be removed transbronchially, and the surgeons maintained they should be removed either by lobectomy or pneumonectomy.

There are two disadvantages of the transbronchial removal of these tumors. One is their extreme vascularity as Dr. Carrera has already mentioned. Several years ago, Dr. LeJeune lost a patient from hemorrhage resulting from a biopsy of a bronchial adenoma. Actually, the patient did not die from hemorrhage but died from flooding of the tracheobronchial tree with blood. These tumors are so vascular that even biopsies are dangerous.

Iceberg tumors

The other factor, which Dr. Carrera has also referred to, is that although they present within the bronchus, usually a far greater share of the tumor is outside the bronchus. These were described by the late Evarts Graham as "iceberg tumors" in that only a small portion of it is apparent and most is submerged. Therefore, if one removes only the intrabronchial portion, the greatest portion of the tumor is left behind, although by the removal of intrabronchial portion the airway can be opened.

The third reason that I think lobectomy or pneumonectomy should be done is that these tumors do metastasize, as Dr. Carrera has emphasized, and frequently metastasize distantly, although at the outset they metastasize to the regional lymph nodes.

They are, however, extremely slowly growing tumors. It is because of this that complacency has been prevalent and many have thought that these tumors can be treated conservatively. I believe that conservative treatment is seldom, if ever indicated, in the treatment of these lesions; only by removing the involved bronchus, the adjacent lung, and the regional lymph nodes can a cure be obtained. In many instances, as in this, a pneumonectomy is necessary.

Radical

As you all know, we feel here that radical surgery is indicated not only in these relatively benign tumors, but also in malignant tumors. Although at the present time there is considerable tendency toward the conservative treatment of malignant lesions of bronchus, in our own series we have never been able to cure a patient with bronchogenic cancer by lobectomy. This is probably not fair to lobectomy because we have done lobectomies only in those patients whom Dr. Hatch told us, as a result of his carefully performed pulmonary function studies, that a pneu-

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monectomy could not be tolerated.

Obviously, therefore, lobectomy is done only in the much poorer risk patient. I am sure that there might be some patients who could be cured by lobectomy, but I am equally sure that a larger percentage of patients can be cured by pneumonectomy with an en bloc excision of the regional lymph nodes which is the only rational type of cancer operation.

DR. CARRERA: In summary, we have a case of cylindromatous type of bronchial adenoma arising from the main upper lobe bronchus of the left lung, with invasion of lymphatics and metastases to regional lymph nodes, and in the same lung a relatively rare anomaly called sequestrated lobe receiving its blood supply from the abdominal aorta and shunting into the left side of the heart through the pulmonary veins.

Edward H. Leveroos, M.D.

Guest Editorial

Hospitals and Socialized Medicine

Hospitals throughout the country find themselves on the horns of a dilemma and the horns are multi-pronged and not simply bicornuate. On the one hand, there is the ever increasing demand by the public for more and better services of all kinds including the latest and best of diagnostic and therapeutic procedures and techniques. On the other hand, there is mounting public criticism of and increasing governmental interest in the high cost of hospital care. Again, hospitals are faced with pressure from some segments of the profession and from ancillary professional groups for greater economic concessions and benefits while management is attempting to keep costs at a level within the average patient's ability to pay.

In a recent report on per diem costs, the average for hospitals of 225 bed capacity and larger ranged from $27.85 to $39.46, depending upon the section of the country reported on. It has been estimated that hospital costs will continue to rise by 5 to 6 percent annually for the next several years. At what point will the public refuse to accept the inflationary spiral and

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demand government intervention—or has that point already been reached?

Hospitals have traditionally been on the side of organized medicine in holding the line against further encroachment by the Federal Government into the health field. They are fully aware that theirs is a common cause and that the socializing of the hospital industry will inevitably follow if not precede the socialization of the profession. That there has been some weakening in this position is evident in the actions taken by a national hospital organization with respect to certain Federal legislation under consideration by Congress this past year. This apparent breach in the dike has been a matter of considerable concern to a sister organization in the medical profession. One wonders, however, how long hospitals can maintain their traditional viewpoint, considering the pressures to which they are being subjected from all sides—the public, governmental agencies at all levels, the profession itself and other groups with their own vested interests.

In England, a lack of solidarity within the profession was a major factor in the introduction of government controlled medicine in that country. In this country, it may well be that the capitulation of hospitals to government subsidization and hence control will be the breakthrough marking the beginning of the end of our present system of medical care. Should this change come about, it will eventuate not because of basic differences of

political philosophy between governing boards and hospital administration as opposed to the medical profession but rather because of the hard facts of hospital economics and the realization that conflicting interests cannot be met and hospital costs maintained at a level consistent with the consumer's ability to pay.

How the dilemma will finally be resolved will be a matter of paramount concern to the public, the profession and everyone connected with the hospital industry, to say nothing of the planners interested in bringing about the socializing of the health field.

WHAT'S IN A NAME?

She married her wealthy patient,
Took him for better or worse,
And that, no doubt, is the reason,
They call her a "practical" nurse.

STEPHEN SCHLITZER

Ochsner Foundation

The history of the Alton Ochsner Medical Foundation, the Ochsner Foundation Hospital and the Ochsner Clinic is one of remarkable growth and development.

In 1941, five New Orleans physicians established a partnership for the private practice of medicine. At the time, all five were actively engaged in teaching at Tulane University School of Medicine, four as full professors and department heads.

In January 1942, the first patient of the newly organized group was seen at the Clinic building in New Orleans.

Today, the Clinic staff numbers 81 physicians and surgeons, all engaged in the group practice of medicine on a full time basis. Approximately three - fourths of the Clinic staff have teaching appointments, the majority at Tulane University School of Medicine.

Medical foundation

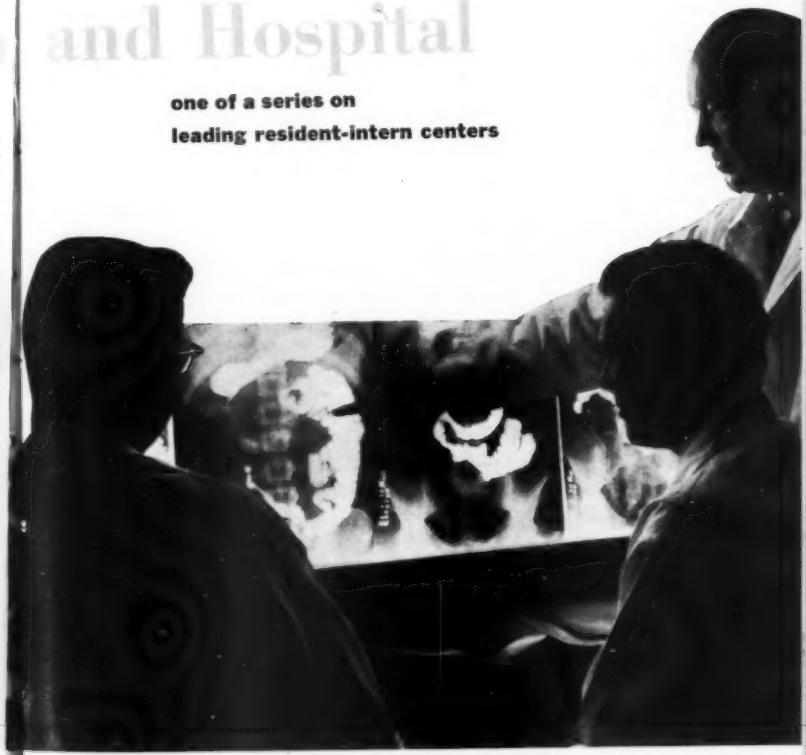
The Alton Ochsner Medical Foundation, or "AOMF" as the Foundation has come to be called over the years, was the second phase in the development of the three related institutions. Established in 1944 as a nonprofit organization, and dedicated by charter to the purpose of education, research and charity, its affairs are guided by a board of trustees which includes the five original partners of the Ochsner Clinic and two civic leaders.

While the Hospital does not operate a "free" clinic, patients are admitted on grants by the

With an outstanding record of growth, this southern center offers approved training in 14 specialties to its house staff of 65 residents and interns

and Hospital

one of a series on leading resident-intern centers



Foundation, as service or charity cases when referred by the Clinic or by physicians throughout the state and surrounding areas.

In addition to its charity work, the Foundation supports an extensive research program under the direction of Dr. Albert Segaloff, a clinician whose major research interests lie in the fields of oncology and endocrinology, and Dr. Otto Schales, D.Sc., a biochemist whose work in enzyme chemistry has been carried on since the Foundation was first established. The investigative activities of the Foundation are presently housed in a modern, well-equipped Research Building located on the hospital grounds, and completed at a cost of approximately $750,000 in April 1959.

The third function of the Alton Ochsner Medical Foundation, in addition to charity and research is that of graduate education which is conducted primarily at the Ochsner Foundation Hospital.

During the first few years of its existence, the Clinic admitted patients to one of the major hospitals in the New Orleans area with which members of the Clinic staff had been closely associated. However, as the patient load increased, it became evident that separate facilities were essential. Accordingly, in 1947 the Foundation acquired from the War Assets Administration, the buildings and equipment of the Camp Plauche Station Hospital, on the outskirts of New Orleans. This "war surplus" hospital in spite of its limitations, served the purpose and was the forerunner of the present modern hospital plant, located on 20 acres of Foundation owned property, about 15 minutes driving distance from the heart of New Orleans.

Present hospital

The present $5.5 million Hospital was completed in 1954 with a capacity of 250 beds and 20 bassinets. It is being expanded to approximately 400 beds by the addition of two new floors, including one especially designed for chronically ill patients and a separate psychiatric unit. This addition is due to be completed by late summer, 1960.

While the Hospital is an administrative unit of the Alton Ochsner Medical Foundation, responsibility for its activities has been delegated to a board of governors made up of outstanding citizens from the New Orleans area, Arkansas, Alabama, Mississippi and Texas.

The five original partners of the clinic were Drs. Edgar Burns, urologist, Guy A. Caldwell, orthopedic surgeon, Francis E. LeJeune, otolaryngologist, Alton Ochsner, surgeon and Curtis Tyrone, gynecologist-obstetrician. The Ochsner Clinic, established by surgeons and surgical specialists, added to its staff internists and other physicians so that all major medical specialties were soon represented. More than 200,000 admissions have been registered, the current patient load running at about 5,000 per month, of whom approximately 1,000 are new patients.

The Clinic Staff maintains liaison with the School of Medicine, Tulane University through a joint committee with representation from the two groups to consider matters of mutual interest. The "teaching tradition" of the staff accordingly, is an honored one and carries over into the graduate education program of the Foundation and Hospital.

Features

Features of the Hospital include complete air-conditioning, a large laboratory area with 20 separate units covering some 12,000 square feet of floor space, a family lounge where relatives and friends of patients undergoing surgery receive periodic reports on the progress of the operation, a recovery room maintained on an around-the-clock basis and many other diagnostic and therapeutic facilities in the Hospital proper.

Other unusual features of interest include a heliport at the rear of the building (frequently used in transporting patients to the Hospital by helicopter—particularly accident cases from offshore drilling operations in the Gulf of Mexico), and Brent House, a guest house adjacent to the Hospital which offers hotel accommodations for relatives and friends of patients. Two additional floors have recently been added to this building to provide office space for some departments of the Clinic.

Library

The Library contains some 5,000 reference works and texts and 165 journals which represent the most widely referred to periodicals for medicine, surgery and the specialty fields. The reference section includes all major medical indices, the Index-Catalogue, the Quarterly Cumulative Index

Medicus and Current List of Medical Literature. These holdings make up the working collection of the Library. In addition, it has access to an additional 175,000 volumes and some 1,200 journals through a lending arrangement with the medical libraries of Tulane and Louisiana State Schools of Medicine. Source material which is unavailable at either of these libraries is obtained from the National Library of Medicine in Washington, D. C.

A reading room adjoins the Doctors' Lounge. Current journals are on display in the Lounge, with a coffee bar near at hand.

Graduate education

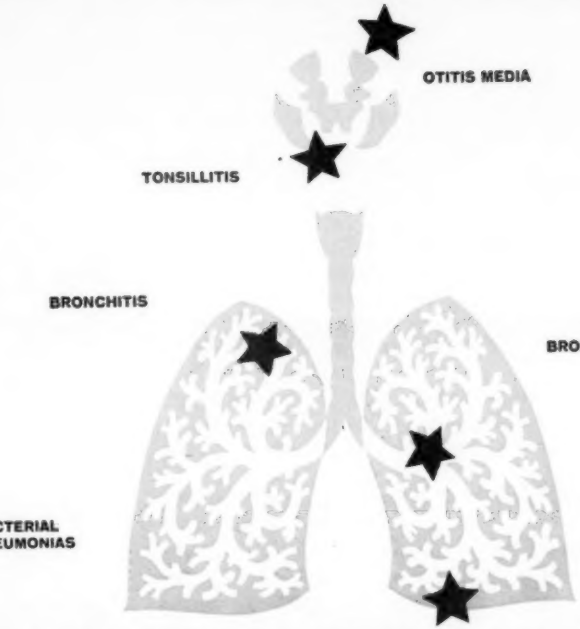
At present, graduate education at the internship and residency level is being conducted in 14 specialties; anesthesiology, cardiovascular diseases, gastroenterology, general surgery, internal medicine, neurological surgery, obstetrics - gynecology, ophthalmology, orthopedic surgery, pathology, pediatrics, proctology, radiology and urology.

Primary responsibility for the organization and development of the teaching program in all specialties lies with the head of the service and members of the departmental staff. The various programs are coordinated through a Committee on Graduate Education of the active staff with administrative responsibility centered in the Office of Graduate Education. This office is under the direction of Edward H. Leveroos, M.D.; in addition, Dr. Thomas E. Weiss, internist, serves as Program Coordinator, Department of Medicine and Dr. Kenneth K. Meyer, surgeon, as Program Coordinator, Department of Surgery.

CPC

Two formal meetings are held each month as part of the educational program for both the house staff and the active staff. On the first Wednesday of the month, a clinical pathological conference is conducted by the department of pathology; on the third Wednesday, a scientific meeting is held which may include a review of clinical investigation being conducted by one of the departments of the Hospital, a guest speaker, and frequently a panel discussion or series of papers by members of the staff.

There are numerous low rental housing facilities available in the vicinity. Arrangements for renting such accommodations by married interns and fellows can be made on request to the graduate education office. There are



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1. Lysaught, J. N., and Cleaver, W.: Proceedings of the Detroit Symposium on Antibacterial Therapy (Michigan and Wayne County Academies of General Practice, Detroit, Sept. 12, 1959).

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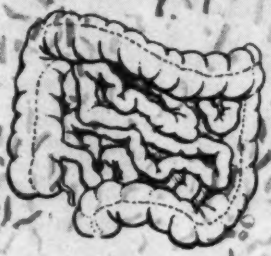


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churches of all denominations near the Hospital and in downtown New Orleans. In the Hospital itself, there is a small Chapel of Prayer, a non-denominational facility sponsored by several of the church organizations in the city.

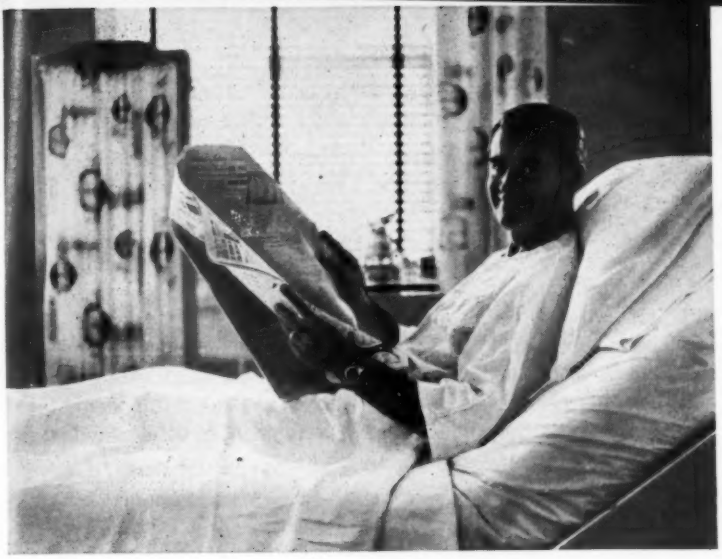
Fellowship association

The Fellowship Association of the AOMF was organized in 1948, a year following the move into the old Camp Plauche Station Hospital. It now numbers over 400 active and alumni members. It is a self-governing organization whose purposes are both scientific and social.

The Fellows' Association functions throughout the year through its Active and Alumni organizations, promoting, according to its constitution "friendship among the fellows of the Foundation" as well as "the advancement of medicine" through encouraging scientific interest among members of the house staff. The Association has contributed effectively to the development of the educational program at the Hospital as well as to its own specific interests.

Internships

A limited number of straight internships, four in medicine and four in surgery are offered. The medical internship program, under the direction of Dr. Hugh Batson, department of medicine, is designed to provide instruction and experience in the basic as-



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pects of the specialty and a broad foundation for advanced training in medicine or in another specialty field.

Assignments

Interns' assignments are made on a quarterly basis and include rotation on the three medical services of the Hospital as well as one quarter on the pediatric service. The intern also is assigned to emergency room duty under the supervision of fellows (residents) and members of the active staff.

An active autopsy service permits the intern to participate in this aspect of graduate education. The Hospital has consistently maintained over the years an autopsy rate of 75 percent or higher which has placed it among the 20 civilian hospitals approved for intern training having the highest necropsy percentages.

Surgery

Under the direction of Dr. Kenneth K. Meyer, department of surgery, the surgical internship is organized to develop critical evaluation of the patient, his history and laboratory findings through observation and active participation in the patient's care; to develop surgical judgment through careful and studied preoperative analysis and through assisting at operations; and finally, to foster independent study and objective evaluation of surgical literature.

Assignments are made on a quarterly basis to four surgical services all of which include general surgery but each having a field of special interest; e.g., cardiovascular surgery. Emphasis is placed on familiarizing the intern with surgical anatomy, the development of surgical judgment and pre- and post-operative care of the patient rather than, at this early stage, the acquiring of surgical techniques and skills.

Rotation

The intern attends all departmental meetings including biweekly morbidity and mortality conferences at which work in the department is critically evaluated. Weekly pathology conferences are held for the interns and fellows, which include a review of all surgical specimens, gross and microscopic, removed at operation during the preceding week. Seminars are held regularly to review surgical principles and the basic science aspects of the specialty. The surgical intern serves in rotation in the emergency room as do all other interns and fellows.

Appointments to both medical and surgical internship programs

Scopicon permits several residents to view tissue slides simultaneously.

are made through the National Intern Matching Program.

Internal medicine

Dr. William R. Arrowsmith heads the department of medicine which includes three general medical sections as well as sections of allergy, dermatology, cardiovascular diseases, chest diseases, gastroenterology and hematology. The fellowship program is of three year's duration with three appointments made annually.

- First year. Assignments are made to the several general medical sections of the Hospital and may include one quarter of outpatient experience at the Ochsner Clinic. Close contact is maintained with members of the departmental staff who conduct daily teaching rounds following which free discussion of problem cases is encouraged between the staff members and fellows.
- Second year. Fellows are rotated through the subspecialty sections and may also elect a period of three or more months in one of the special laboratories (i.e., pulmonary physiology, cardiovascular, endocrinology).
- Third year. Fellow assumes major responsibility for patient's workup and management under the supervision of a staff member. During final six months the fellow works closely with a senior member of the department at both the Hospital and the Clinic where practical considerations of office practice are emphasized as well as the scientific workup and management of patients.

Basic science seminars are conducted throughout the year cov-

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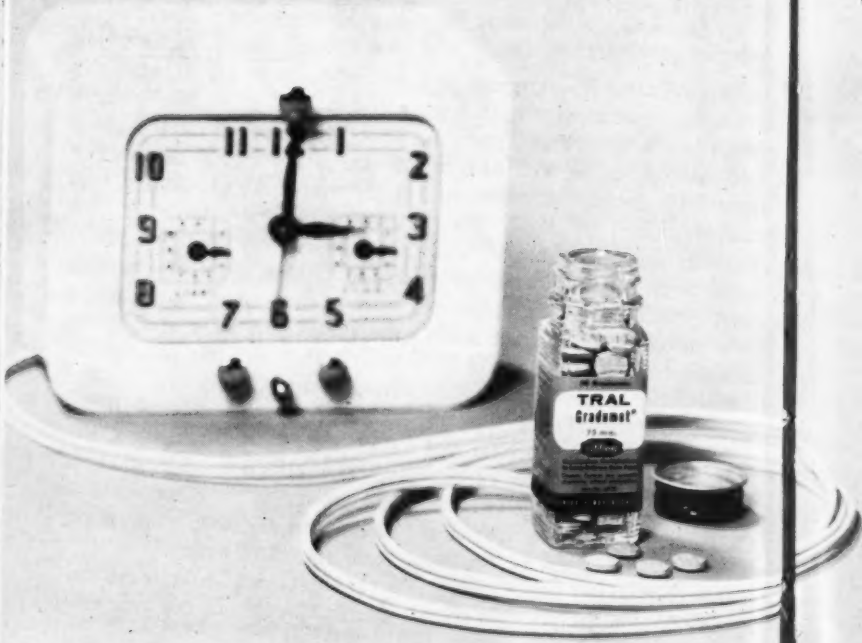

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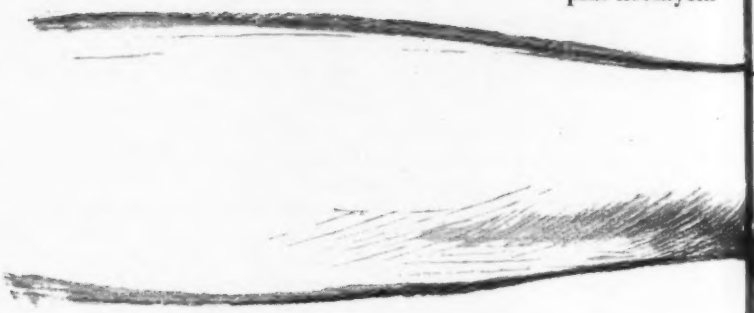

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For inflammatory, allergic, infective eye and ear conditions

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NEO-ARISTODERM Foam spreads readily without irritation or burning. It can be applied to oozing, crusted, severely inflamed and injured skin, or to mucous membranes. There have been no reactions of primary irritation or allergic sensitization to date.

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NEO-ARISTODERM Foam *is neat—not messy or sticky*. Patients like the attractive push-button dispenser and the richness of the foam. This helps to assure faithful adherence to your instructions.

Triamcinolone Acetonide 0.1%, Neomycin Sulfate 0.35% *15 cc. Push-button dispenser*

References: 1. Kanof, N. B., and Blau, S.: *New York J. Med.* 59:2184 (June 1) 1959.
2. Smith, J. G., Jr.; Zawisza, R. J., and Blank, H.: *A.M.A. Arch. Dermat.* 78:643 (Nov.) 1958.

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ering the fields of pathology, physiology, radiology and other such specialties as they relate to internal medicine. Dr. Thomas E. Weiss serves as program coordinator, with 31 full time internists and medical specialists actively participating in the teaching program.

Cardiovascular diseases

This cardiovascular program, of one year's duration, is headed by Dr. Harold McL. Horack, and covers the fields of clinical cardiology, electrocardiography, cardiac physiology, cardiac anatomy and pathology, as well as pediatric cardiology. Appointments are limited to one fellow annually. The year may be taken as part of a three year program in internal medicine or as an additional year in qualifying for certification in the subspecialty.

Gastroenterology

Training in gastroenterology, under the direction of Dr. William D. Davis, Jr., stresses the careful workup and scientific management of patients with gastrointestinal complaints. Teaching is both informal at daily rounds and conferences and of a more formal nature including lectures and conferences on all aspects of the subspecialty. The

SATURDAY CONFERENCES

In addition to departmental activities and daily informal teaching rounds, a series of regularly scheduled Saturday morning conferences are held throughout the fall, winter and spring quarters. A surgical conference, at which interesting cases are reviewed and the management of the problem is discussed, is followed by two conferences sponsored jointly by parallel sections of the departments of medicine and surgery; the first, co-sponsored by the sections on gastroenterology and proctology, is followed by a similar conference put on by the sections on chest diseases and thoracic surgery.

The final hour of the morning is given over to departmental conferences including a course in electrocardiography, a review of surgical specimens in several departments and film reviews in the department of radiology. The radiology and pathology departments participate in all scheduled conferences and seminars.


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*Shane, S. J., Krzyski, T. E., and
Copp, S. E.: Canad. M.A.J. 77:600
(Sept. 15) 1957.
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fellow participates actively in teaching, instructing interns and junior fellows in internal medicine. One appointment is made annually.

Pediatrics

The Hospital participates in pediatric training through affiliation with the program headed by Dr. Ralph Platou, Tulane Unit, Charity Hospital, New Orleans. Two Fellows are appointed annually, each of whom rotates on a quarterly basis between Ochsner Foundation Hospital and the Tulane Service at Charity. The final year of training in the specialty is taken at Charity Hospital on appointment by the School of Medicine, Tulane University.

During the time he spends as resident pediatrician at Ochsner Foundation Hospital, the fellow attends regular weekly conferences, conducted at the Hospital, where cases are presented and discussed by members of the departmental staff and by Dr. Platou, visiting consultant.

The departmental staff at Ochsner Clinic and Ochsner Foundation Hospital is headed by Dr. C. Harrison Snyder whose special interest, along with that in general pediatrics is in the field of pediatric neurology.

General surgery

The surgical fellowship is under the active direction of Dr. Alton Ochsner, Sr., head of the department of Surgery. Dr. Kenneth K. Meyer serves as program coordinator. A five year program is being conducted at the Hospital and at two State of Louisiana charity hospitals with which it maintains affiliation. One year of the program is organized at the internship level followed by four years of fellowship (residency) training. During these four latter years the fellow rotates on a quarterly basis through four surgical services serving as first assistant during one year and staff assistant during his last year of training.

At either the first or second year level, fellows serve for three months on each of the following services: gynecology, orthopedic surgery, proctology and urology.

Assignments to the Department of Pathology for three month periods are made on an elective basis during the first and second year of the Fellowship program.

The third year is spent at one of the two State charity hospitals where the fellow assumes direct responsibility for operative procedures under the supervision of the visiting staff and further

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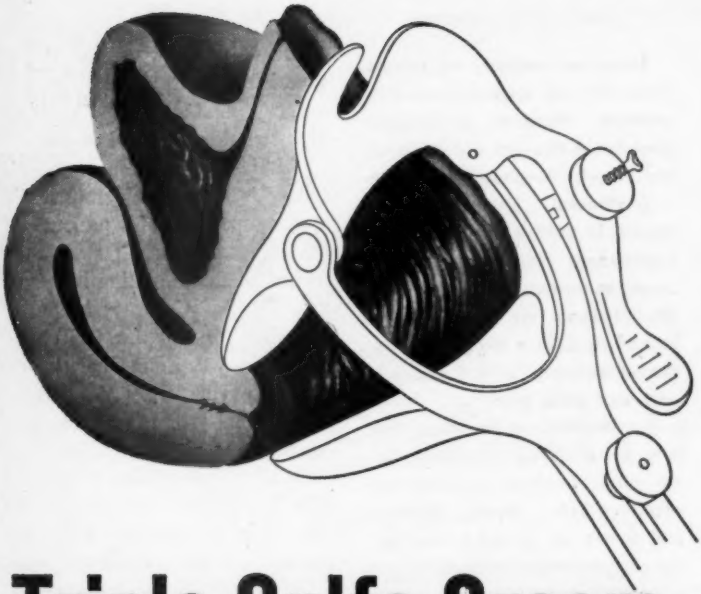

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FELLOWS AND INTERNS

There are currently 65 fellows (residents) and interns engaged in graduate education at Ochsner Foundation Hospital and the three state charity hospitals with which it is affiliated. Interns receive a stipend of $125 a month and full maintenance including board, room, uniforms and laundry service. Fellows are started at a stipend of $225 a month with an annual increment of $25 a month each succeeding year.

Accommodations for single fellows are available in an annex to the nurses' residence at a nominal rental of $15 a month. Fellows and interns are provided meals in the staff-personnel cafeteria where a selective menu of well prepared food is offered.

In addition to stipends, board and rooming accommodations, the Hospital takes out a Blue Cross policy for all members of the house staff, as well as sickness and accident coverage and a $1,000 life insurance policy, all of which are paid for by the Hospital. Fellows are also provided with malpractice insurance; since interns are presumed to be acting as agents of the medical staff and not as independent practitioners of medicine, malpractice insurance is not required for them.

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supervision through weekly visits made to the affiliate hospital by members of the department of surgery at Ochsner Clinic and Ochsner Foundation Hospital.

After gradual maturing, the fellow is given full responsibility under supervision for patient care and management on assignment to one of the affiliating hospitals; i.e., E. A. Conway Memorial Hospital, Monroe, La. (250 beds) or the Huey P. Long Charity Hospital, Pineville, La. (250 beds).

The final year is spent as Staff Assistant at Ochsner Clinic and Ochsner Foundation Hospital with assignment to one of the four surgical services. Four appointments are made each year.

Neurological surgery

This neurological surgery fellowship is one of the long established programs at the Hospital having been organized and developed by Dr. Dean H. Echols who heads the department. The program is of four years' duration including 30 months of clinical neurosurgery, 6 months of clinical neurology and a year designed to meet the needs of the individual Fellow which may include general surgery, additional work in neurology, assignment to a basic science department or investigative work.

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1. Macy, I. G.; Kelly, H. J., and Sloan, R. E.: With the Consultation of the Committee on Maternal and Child Feeding of the Food and Nutrition Board, National Research Council: The Composition of Milks, National Academy of Sciences, National Research Council, Publication 254, Revised 1953.

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Symbol of service in medicine

Three of the four years are spent at Ochsner Foundation Hospital and a fourth year at Charity Hospital, New Orleans.

During the first year, the fellow attends a course in neuropathology and related basic sciences at Yale University School of Medicine. Continuing instruction in neuroanatomy, neuropathology and neurophysiology is given by Dr. Echols and members of the departmental staff throughout the year. While at Charity Hospital, on the Tulane Service the fellow is in active charge of all patients admitted to that service, and is assisted by an intern and a resident in general surgery. His work is supervised by members of the departmental staff, Tulane University. One appointment is made each year with a total of four fellows involved in the program.

Obstetrics-Gynecology

The Ob-Gyn program is headed by Dr. Curtis Tyrone with Dr. John C. Weed, a senior member of the departmental staff, in active charge of the fellows' training. The program is three years, 30 months of which are spent at Ochsner Foundation and Ochsner Clinic and six months at E. A. Conway Memorial Hospital.

Fellows are assigned during the first six months to the general diagnostic section, Ochsner Clinic, and the endocrinology laboratory.

The next six months are spent on the Ob-Gyn service at Ochsner Hospital under close supervision of staff members and more advanced fellows. He is in charge of preoperative and postoperative-care and assists at every operation and delivery.

In charge

The first six months of the second year, the fellow may be assigned to the department of pathology at Ochsner Hospital on a full time basis or to another service such as general surgery. For the final 18 months the fellow is assistant to the staff at both Clinic and Hospital where he follows all obstetrical and surgical cases. Here he is in close contact with patients from their first appointment until discharge.

During this period, the fellow spends six months at the E. A. Conway Hospital where he is in charge of the obstetrical and gynecological service, performs gynecological surgery, carries out obstetrical procedures and supervises the work of general practice residents who are responsible for the outpatient clinics. He works under a local obstetrician as well as under the indirect supervision

off to a good day—constipation relieved

Pleasant-tasting Agoral is the laxative virtually tailor-made for busy people. Taken at bedtime, Agoral works effectively and gently overnight, without disturbing sleep, to produce a normal bowel movement the next morning—*before* the day's activities begin.

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the gentle laxative

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AG-HS02

Resident attends emergency patient brought by helicopter to Ochsner Hospital.

of members of the Ochsner Clinic who make regular visits to the hospital to hold conferences and supervise the surgery schedule on that day. Two appointments are made annually with a total of six fellows in the program.

Ophthalmology

Dr. Robert Schimek heads the department of ophthalmology at both the Hospital and Ochsner Clinic. The fellowship in ophthalmology consists of a three year period of training. During the first year, the fellow takes the didactic portion of the basic science course in ophthalmology at Tulane University (unless he has already taken a basic science course meeting requirements of the American Board of Ophthalmology, or unless he elects to take the home study course sponsored by the American Academy of Ophthalmology.

- First year. Fellow assists in performing examinations and refractions on outpatients. He is expected to be present or to assist at operations (limited by his primary responsibility in attending the basic science courses in the morning) and to assist with examinations of outpatients in the afternoon. He performs a routine physical examination and eye examination on all admissions of ophthalmology inpatients.
- Second year. Fellow is

anorectal comfort in minutes For full symptomatic control in hemorrhoids, proctitis and pruritus ani *start* treatment with 2 Anusol-HC suppositories daily for 3 to 6 days to eliminate all inflammatory symptoms rapidly and safely. Then *maintain* lasting comfort with 1 regular Anusol suppository morning and evening and after each bowel movement. Neither product contains analgesics or narcotics, will not mask serious rectal pathology.

anusol® *hemorrhoidal suppositories and unguent*

anusol-HC® *dependable Anusol w/hydrocortisone*

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AN-M502

given responsibility for care of routine outpatients at the Ochsner Clinic with consultation when desirable. He assists at operations and is responsible for the examinations of inpatient referrals and outpatient referrals from other departments.

- Third year. Fellow assumes more independent responsibility for outpatient diagnosis and treatment and inpatient care, and performs eye surgery at Foundation Hospital under the direction of the full time staff. One appointment is made annually for a total of three fellows assigned to the department.

Orthopedic surgery

Orthopedic surgery is headed by Dr. Harry D. Morris. Dr. Guy A. Caldwell serves as a senior consultant to the department while Dr. Mary S. Sherman is in active charge of the fellows' training

The program is of four year's duration and includes training in all aspects of the specialty; i.e., adult orthopedic surgery, children's orthopedics and the basic sciences as related to the specialty. Experience in children's orthopedic work at the hospital is supplemented through assignment to one of several hospitals with which the program is affiliated, outpatient work at the Ochsner Clinic, and through clinics with members of the departmental staff associated with the Crippled Children's Program, State Department of Health.

One fellow is appointed each year for a total of four. In addition, one or two other appointments are occasionally available depending upon the requirements of the program.

Proctology

The section on proctology, headed by Dr. Merrill O. Hines, conducts a two year program including training in the field of colon surgery as well as anorectal diseases. One fellow is appointed annually with preference being given to applicants completing their training in general surgery at the Hospital.

Urology

Dr. Edgar Burns heads the department of urology and is in active charge of the fellows' training. The program is three years in length, including two years spent at Ochsner Foundation Hospital and a third year at one of the two state charity hospitals affiliated with the program.

During the first two years of his training, the fellow, under close supervision by a member

stop her sinus headache

In one short year Sinutab has proved itself *the* effective specific for resolving sinus or frontal headache. Sinutab promptly and safely aborts pain, relieves pressure by decongestion and relaxes the patient with mild tranquilization. Verify it for yourself—prescribe Sinutab for your next sinus or frontal headache cases. You *and* your patients will be pleased.

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Sinutab®

resolves sinus headache

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FELLOWSHIPS

All fellowship (residency) programs are of the vertical type; i.e., the programs are structured to provide complete training for all appointees. These programs are fully approved by the Council on Medical Education and Hospitals of the A.M.A. and the appropriate specialty Board; programs in the surgical specialties are also approved by the American College of Surgeons.

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of the staff, alternates between the Ochsner Clinic, which constitutes the outpatient department, and the Ochsner Foundation Hospital, which is the inpatient service. He takes part in an integrated basis science program given by members of the faculties of Louisiana State University, Tulane University, Veterans Administration Hospital and the Ochsner Foundation.

At the end of his second year, the fellow is transferred to the Huey P. Long Charity Hospital, a 350 bed institution, devoted entirely to indigent care. The fellow is expected to carry out full patient care, including operative surgery. During his year there, he is able to perform approximately 200 well diversified major urologic surgical procedures. One fellow is appointed each year with a total of three appointments to the service; in addition, fellows from the department of surgery may rotate on the service for periods of three months.

Anesthesiology

Dr. George B. Grant has served as head of the department of anesthesiology since its inception with Dr. Francis X. LeTard in charge of the fellows' training. The department consists of five full time anesthesiologists who personally administer or supervise the administration of all anesthetics given in the Hospital, including obstetrical anesthesia. The fellowship is organized on a two year basis.

Basic sciences and anesthetic management of surgical specialties, special operations and complicating diseases are covered in lectures and conferences by Dr. John Adriani, professor of surgery (anesthesia) at Tulane and Louisiana State Universities, and head of the department of anesthesiology, Charity Hospital, New Orleans, and members of the departmental staff at the Hospital. Clinical experience is gained at the Ochsner Foundation Hospital (8,000 anesthetic procedures annually on private patients

all quiet on the ulcer front Even under stress and tension Gelusil antacid adsorbent keeps peptic ulcer patients pain-free all day long. Gelusil is the only antacid that coats the ulcer with two protective, long-lasting, acid-adsorbing gels while simultaneously removing excess acid. Pleasant-tasting Gelusil is *all* antacid—nonconstipating—contains no laxative.

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the physician's antacid

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administered entirely by staff anesthesiologists and fellows in anesthesiology).

Ordinarily, three appointments are made annually with a total of six fellows in the program.

Pathology

The department of pathology includes four full time pathologists under the direction of Dr. G. M. Carrera, department head. The training program in clinical pathology is carried out under the supervision of Dr. Myrton F. Beeler. A four year integrated program in both pathologic anatomy and clinical pathology is offered.

One fellow is appointed annually to this program with a total of four in the combined training in pathologic anatomy and clinical pathology.

Radiology

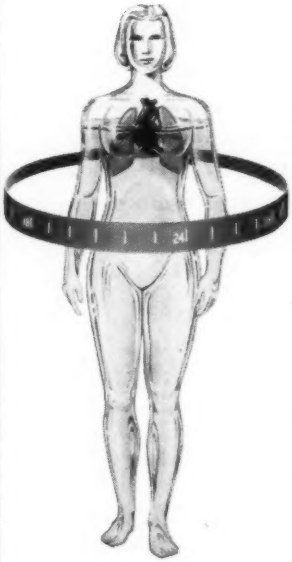
The departmental staff of five full time radiologists is headed by Dr. Edgar H. Little; Dr. Buell C. Buchtel serves as head of the hospital section; the fellowship program is under the supervision of Dr. Seymour Ochsner, actively supported by the other members of the department.

This program offers training in the entire field of radiology including diagnostic roentgenology and all phases of therapeutic radiology.

"Now you let me know the minute you feel up to worrying."

Fuchs, M. and Moyer, J.:
Diseases of the Chest 35:314, (March) 1959.

"Premenstrual edema is present in 40% of women and...consists of weight gain, subcutaneous edema, emotional lability, breast turgidity, anxiety and tension." In addition to controlling the objective symptoms of premenstrual tension, HYDRODIURIL may afford relief of subjective complaints including tension, nervousness and headache.



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Medicine and Public Health

Edward G. McGavran, M.D., M.P.H.

Dean, School of Public Health
University of North Carolina

For many years the physician in public health was looked down upon by the practitioners of medicine. There are still some doctors whose knowledge in the public health field is so limited that they cling to this and other outdated concepts. Fortunately, organized medicine has abandoned so archaic an attitude.

There are now approximately 1,900 Board-certified public health specialists in the United States. There are now 1,040 members of the College of Preventive Medicine—all recognized by the American Medical Association. We are a big and rapidly growing medical specialist group, and one that state and local medical societies would do well to recognize and use for our distinctive knowledge and competence.

There is, however, one "fly in the ointment" in this specialty's phenomenal growth and development. The terminology used for our specialty is "preventive medicine" rather than "public health." It is unbelievable, but true, that this simple semantic error has produced and continues to produce so much misunderstanding, controversy and criticism.

This association of "preventive medicine" and "public health" is

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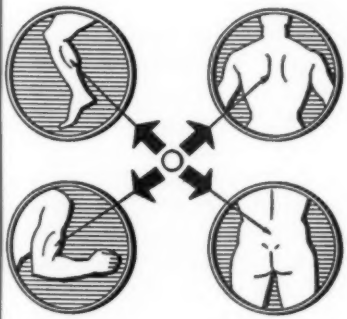

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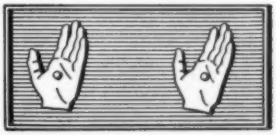

*Trademark U. S. Patent No. 2,567,351
Other patents pending

Riker
Northridge, California

natural. Public health was first associated with sanitation of the environment, later with medical indigency and welfare, and then with communicable disease control. With each of these areas, particularly the latter, emphasis was placed upon preventive procedure. Soon, the terms "public health" and "preventive medicine" were being used interchangeably.

Evolution

From the point of view of medicine and public health this was and is extremely unfortunate. In the first place the whole evolution and development of medical science in the past 25 years has been toward preventive medicine. Pediatrics, obstetrics and psychiatry have taken the lead in emphasizing and incorporating preventive service into the practice of those specialties, but every other medical specialty, and indeed, general practice, has become dedicated to preventive medicine.

A larger and larger portion of all medical practice is becoming preventive in every sense of the word. Medical education is taking a leadership role in emphasizing preventive medicine by departmental status and by incorporating preventive medicine teaching into all clinical departments.

Preventive medicine is good medicine, and the neglect of preventive medicine is poor medical practice and poor medical teaching.

Now it is obvious that if public health *is* preventive medicine, we are committing the cardinal sin of infringing upon good medical practice in all fields—general and special.

Primary

In the second place, the whole history and evolution of public health science has been away from individual preventive medicine as it is practiced by the clinician, and directed toward primary prevention, toward community prevention, controlling or changing the environment, or reaction to the environment of groups—not individuals.

Public health science has long recognized its responsibility and distinctive competence in other than the preventive field. It has been responsible for provision of hospital facilities, making available medical care, from venereal disease treatment to psychiatric treatment, education of the public to accept and use good medical care, providing health manpower for medical care from nurses aides to nurses, and from medical technicians to medical specialists.

Geriatrics is a public health problem. We are not going to try to prevent—old age.

It follows therefore that neither public health nor medicine can continue to use "preventive medicine" as synonymous with "public health" or as a definition of public health.

Purpose of public health

What then does delineate the science of public health from the science of medicine, since different aspects of preventive medicine are an integral part of both sciences? It is the purpose, focus or objective of public health science that is distinctive.

The purpose, focus and objective of medical science is broadly the scientific diagnosis and treatment of health needs and status of the individual. It is patient centered.

Total community

Public health, on the other hand, is community centered. Its objective and purpose is the scientific diagnosis and treatment of the health needs and status of communities.

Preventive, palliative, curative, and rehabilitative services are essential in both public health and medical sciences.

Public health science, as medical science, is in an evolutionary process. Health science of 1850 was symptom-centered, the scientific diagnosis and treatment of symptoms. In the next 50 years it changed its focus completely and became disease or bacterial-centered—the diagnosis and treatment of disease. The third profound development came about 1900 with the concept of "clinical medicine"—again, with a change of focus from disease to the total individual, the diagnosis and treatment of the physical, mental, emotional and social individual as an entity, not merely an aggregate of electrons and atoms, cells and segments.

We now recognize a fourth profound change and development in public health science which again changes focus, to the community, the diagnosis and treatment of the total community as a patient, an entity, and not merely an aggregate of individuals; an entity as distinctive from every other community as every individual is distinctive from his neighbor.

The ills of society are not necessarily the same as the ills of individuals composing that society. As Canon Charles E. Raven states in the *Saturday Review of Literature* of June 7, 1958:

"We ought to be as prepared to

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Low back pain, sprain

Analgesics alone merely mask pain. New Medaprin adds Medrol* to suppress the inflammation that *causes* the pain and stiffness. Thus, to the direct relief of musculoskeletal pain,

Medaprin†

adds restoration of function.

Medaprin is supplied in bottles of 100 and 500 tablets, each containing: 300 mg. acetylsalicylic acid for prompt relief of pain; 1 mg. Medrol to suppress the causative inflammation; 200 mg. calcium carbonate as buffer.

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*methylprednisolone, Upjohn

look at the corporate madnesses and diseases of our time as searchingly and with as deep a sense of responsibility as we do the individual defects. I do not think we can cure the major evils of modern collective life merely by treating individual members privately and separately because I do not believe that the evils of our corporate life today are caused or can be cured by individual action.

"I believe what gives us our trouble is the acceptance corporately of methods, standards and procedures, which, as individuals, we should condemn as sub-moral, if not sub-human. I should like to see certain departments . . . equipped to study the diseases of corporate life. I believe there is room here for the application of precisely the same skills in diagnosis and treatment . . . which the medical man . . . [uses]."

The good Canon is apparently unaware of this concept of public health and that this is precisely what the science of public health is concerned with.

Now there is much that we can learn from our experience with this changing focus and evolution of health science throughout the past century.

Profound changes develop slowly. Such change is bitterly opposed by eminent scientists of every age. It took 50 years to overcome the opposition of the symptom-centered scientists of 1850 and to establish disease-centered basic science of 1900.

The basic scientists of 1900 denied for 25 years the entity of a total individual. Their denunciations still ring in ears of some of us:

"You cannot diagnose an individual. You can only diagnose disease—pathology."

"An individual is only an aggregate of electrons and atoms—cells and segments. When those are right the individual is well."

Nevertheless, clinical science has become accepted. Diagnosis and treatment of the total individual as an entity is taught and recognized as good medical practice throughout the world, although in actual practice the concept as yet may not have universal application. It should not then surprise us that the concept of the community as a patient, an entity distinct from any other community, with distinctive ills and states of health does not have universal acceptance and even some sincere opposition.

It is, however, surprising how much more rapidly this profound change of focus and purpose is being accepted here and around

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Suppositories

Solely by contact with the colonic mucosa, Dulcolax reflexly produces coordinated large bowel peristalsis with resulting evacuation.

Generally a single evacuation of soft, formed stool without catharsis or straining results.

"A gentle but effective laxative"* In tablet form Dulcolax is eminently convenient when overnight action is required. For more prompt effect Dulcolax suppositories usually act within the hour.

*Archambault, R.: Canad. M. A. J. *81*:28, 1959.

Dulcolax®, brand of bisacodyl yellow enteric-coated tablets of 5 mg. in box of 6 and bottle of 100; suppositories of 10 mg. in box of 6. Under license from C. H. Boehringer Sohn, Ingelheim

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the world than were the previous evolutionary developments of health science.

Complex

The correct diagnosis and treatment of symptoms does not always cure disease. The correct diagnosis and treatment of disease does not always cure the individual. "The operation was successful, but the patient died." The correct diagnosis and treatment of the individual does not always cure the community patient.

In each era of health science there has been a tendency to assume that we "now" have the answer, the method, the technique, the magic drug, only to find that the sure cure of a symptom does not always cure the disease—the sure cure of the disease does not always cure the patient—the sure cure of the patient does not always cure the community—it does not always control or eradicate the disease.

Diagnosis and treatment of symptoms was a fairly simple matter. The subject became much more complex in the disease-centered era, and infinitely more complicated when it became patient-centered. The complexity of the physical, mental, emotional and social individual demanded skills and knowledge of many different specialists in the medical profession.

Now the community patient is as much more complicated than the individual as the individual is over the bacterium. The background skills and knowledge for scientific diagnosis and treatment of a community, therefore, demand many more professional skills than the health professions alone.

Other professions

Besides the physician, dentist, nurse, and laboratory specialists there must be engineers, biostatisticians, nutritionists, educators, and social scientists.

The basic sciences of public health—biometrics, epidemiology, community organization, and public health administration—bear the same relationship to the practice of public health as do the basic sciences of medicine to the practice of medicine. However, these basic public health sciences must be used by many different professional persons with widely varying professional backgrounds.

No one background profession has a corner on knowledge or leadership role.

A team of professional equals is needed to diagnose and treat the body politic. The doctor of the community is not an indi-

vidual but an interdisciplinary team.

Old and new

Although public health is distinctive, has a different focus, has a different patient, uses a distinctive body of knowledge, and has a distinctive competence, it is still closely related and dependent upon old and new knowledge—in all the health sciences and such related sciences as educational science, engineering science, and social or behavioral science, and uses the sophisticated skills of these sciences. Advances in any field may well be significant to public health theory or practice and vice versa.

This concept of public health science is rapidly gaining universal acceptance, although couched in many different terms and arising from many different needs and different individuals.

It is perhaps being accepted too easily and too readily. Its implications are profound and the profound changes in practice required by this philosophy will not be easy and will take years to accomplish.

The first requisite is *the democratic team concept of professional equals*. The "doctor of the body politic" being such a team, leadership on this team is the result of leadership qualities. *Leadership is by the consent of those led and not by previous professional status.*

Public health is not a specialty of medicine alone. Although it requires public health medical specialists, it also requires public health engineering specialists, public health nursing specialists, public health education specialists, public health school social science specialists. In this sense it is not a specialty, but rather a profession—a distinctive profession with distinctive qualities and with a distinctive patient.

Scientific practice

The second requisite is scientific practice. We are all aware of the requirements of the scientific practice of medicine; how you must get a patient to want a diagnosis and follow a treatment; the carefully prescribed step you follow from superficial observation; patient opinion, history and physical examination and laboratory tests; to tentative diagnosis and prescription.

The same is required for scientific diagnosis and treatment of the community patient. The trouble is that public health practice has been program-centered, service-centered, concerned with functions and activities.

Pills and programs

Instead of scientific public health practice, we too often render our community patient the kind of service which was out of date 50 years ago in medicine for the individual patient.

Instead of pill-peddling, we peddle programs. We sell activities. We treat each community as if it and its ills were the same as every other community—castor oil and quinine in fall, sassafras and calomel in the spring—child guidance clinics, well child conferences, premature programs, sanitation programs, public health nursing programs—all irrespective of the chief health needs and problems of our patient. Indeed, we often know that these traditional programs do not meet the chief health needs of our communities, but they all must have the same "pink pills."

We are so busy doing the traditional programs—some required by law—that we have no time left to make a scientific diagnosis or to measure the effectiveness of our prescription and treatment. None of us would tolerate such "quack" practice for the individual patient, but we think it proper for the community patient. The implications of this concept force us to look at the community as a patient and this is very disturbing to the scientifically minded.

As we look at the past and contemplate the future in the light of this concept, many of our cherished beliefs are changed. It becomes obvious that most if not all the successful conquests of disease and illness have not been the result of early diagnosis and treatment of individuals, but rather the result of changing the community environment or reaction to that environment. Typhoid, malaria, yellow fever, hookworm, cholera, plague—all are areas where early diagnosis and treatment failed completely and changing the environment by water purification, sanitation and insect and rodent control on a community-wide basis succeeded. Smallpox, diphtheria, whooping cough, and now polio, came under effective control only by changing the reaction to the environment by mass immunization.

Approach

Epidemiological evidence is further confirming the fact that programs of early diagnosis and treatment in this country have had little or nothing to do with the control of tuberculosis or of syphilis. This is a very shocking fact, not because of giving credit to the past, but because of the

implications for the future.

With the major health problems of today—mental disease, heart disease, cancer, and accidents, what should be our approach? We are so wrapped up in the clinical science approach to individuals that only a tiny fraction of our funds, personnel, efforts, research, teaching or practice is channeled into the community approach, the only approach with hope of success. The vast health research, teaching, and service of our country is aimed specifically at early diagnosis and treatment of disease, although in no instance can we prove that this approach has conquered or controlled any disease in the past. The implications of this concept are indeed shocking and difficult to accept in an individual-centered society.

Clinical training

Lip service is paid to this concept by most educators in public health, but the educational implications would require a complete revision of educational curriculum and method. In all the other health professions and some other related professions, it is axiomatic that the best learning situations are not in the lecture halls or in the laboratories, but at the patient's side—bedside teaching, chair-side teaching, outpatient teaching. The professional schools are devoting a larger and larger percentage of their time to such instruction by clinical professors.

In schools of public health we still turn the students "out to pasture" after lectures, laboratory work, and observation, but without any comparable closely supervised academic instruction at the patient or community side by clinical professors of public health."

Different patient

With all these difficult and profound changes that this concept of public health involves, what are its advantages? What does it do for us?

In the first place, it meets a need felt by people around the world. It is an evolutionary development that will eventually succeed whether we recognize and accept it now or not.

In the second place, it clarifies our relations with the practice of medicine. We are no longer in competition with medical practice. We have a different patient, a distinctive focus and purpose, distinctive skills, competence and responsibility. We must get out of doing medical practice—preventive, curative or palliative for the

V-CILLIN K® produces high levels of antibacterial activity

Infections resolve rapidly with V-Cillin K. All patients absorb this oral penicillin and show therapeutic blood levels with recommended doses. The high levels of antibacterial activity achieved by V-Cillin K offer greater assurance of bactericidal concentration in the tissues—a more dependable response.

Dosage: 125 or 250 mg. three times daily. Supplied as scored tablets of 125 and 250 mg.

also available

V-Cillin K, Pediatric: A taste treat for young patients. In bottles of 40 and 80 cc. Each 5-cc. teaspoonful provides 125 mg. of V-Cillin K.

V-Cillin K® (penicillin V potassium, Lilly)

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individual. That is not our competence or responsibility. Nor is it the physician's competence or responsibility to diagnosis and treat communities.

In the third place, it avoids unnecessary duplication and overlapping of functions and activities. With the shortage of health manpower, we can ill afford waste and conflict. We can scientifically determine community health needs and possible treatment and follow the results of that treatment. We do not need to render that treatment ourselves any more than the family doctor must give the enema or do the brain surgery himself.

Challenge

In the fourth place, it will challenge the best minds in medicine to enter the public health profession. Young physicians are not attracted to a profession or specialty based upon functions, uncertain of purpose and direction, confused and in conflict with his fellow practitioners, limited to administrative boredom or unlimited to incompetence. They are challenged by a new patient, a different patient much more complex than the individual, where they can win leadership by their own effort and excellence, where they may play a part in saving millions of people, or even civilization. Recruitment of young physicians to public health is urgently needed. Medical leadership in public health may well be in the balance.

In the fifth place, it provides sound guidelines for growth and development of:

- Research in public health, community research, primary preventive research, virgin territory which holds the same promise for the next 50 years that clinical research has provided in the past 50 years.
- Education in public health with increasing emphasis upon "community-side" teaching, "patient-side" teaching.
- Scientific practice of public health with less program peddling and quack practice by routinized activities.

Public support

And finally, the community concept of public health will stimulate public confidence and support. The public expects scientific practice. They distrust old quack remedies. They can and are willing to pay for scientific practice for individuals or communities, but they can tell the difference and they are losing confidence with the medical man or public health team that fails to

practice its profession scientifically.

Medicine and Public Health must do more than passively adopt this concept. They must adopt, espouse, and champion this concept to assist public health to emerge as a community-centered scientific practice. Medicine has a tradition of leadership and vision in every era of health science. It cannot fail society today as we face the unprecedented problem of World Health.

NEWS ROUNDS

Progress Against Ca Noted

Research Report—Control of choriocarcinoma by chemicals was indicated in the latest biennial report of the Sloan-Kettering Institute for Cancer Research. In noting the disappearance after drug treatment of the rare choriocarcinoma, the report indicated that while some patients relapsed, in others the benefits have continued for as long as four years and "appear to be permanent . . . and perhaps even the cure of cancer by chemicals has been achieved for the first time." Pioneer work was done at the National Cancer Institute and has been continued at Sloan-Kettering.

Among other cancer research advances noted, were radioactive wire implants and hollow-needle implants of radio-active isotope seeds.

A study of possible hazards in ordinary diagnostic x-rays showed that aim and control of the beam were the vital factors in keeping at a minimum radiation to sensitive body areas. Misalignment of a conventional cone by one degree during a chest x-ray can triple the dose received by the female genitals, the report stated, while failure to adjust the beam for a short man can raise the dose to his genitals sixty times.

A GUIDE for our readers

The conventions of the presentation of advertising material on pharmaceuticals are related to certain ethical and practical considerations. This guide should be of help to all our readers in an understanding of the advertising material contained herein. Unless it is stated to the contrary:

All illustrations of physicians and patients are dramatizations utilizing models and not specific physicians or actual patients. The ethical and other considerations for this are obvious.

Illustrative material such as dummy prescription blanks, hospital charts, calling cards, memos, etc., are presented as dramatizations.

Composite case histories, drawings and/or photomicrographs are often presented to convey typical clinical indications but unless stated to the contrary are constructed as illustrative cases or situations.

Physical limitations of space in journal advertising make the presentation of all relevant data impractical; therefore, it is suggested that for suitable background on dosage indications and contraindications the standard package insert or more extensive background data be consulted.

The acceptance of material for advertising is based upon several criteria; for example, in respect to safety, all new drugs are required to correspond with the accepted Food and Drug application.

It is suggested that any differences of opinion of individual physicians with any advertisements to be called to the attention of the editor, with a duplicate copy of the letter to the pharmaceutical house whose advertisement is the subject of the letter.

THE PUBLISHERS

How the Law Views Diabetic Plaintiffs

Many legal problems are involved when the diabetic comes to court. The relationship of trauma—mental and physical—to diabetes is the subject of much controversy.

It is estimated that there are over a million known diabetics in this country and at least another million undetected cases. The disease ranks eighth as a cause of death in the United States.

Diabetes and automobile accidents are a growing legal problem. Evidence of negligence in diabetic plaintiffs is not uncommon. Dangerous driving and loss of control of automobiles due to disabling giddiness, confusion and fainting in diabetics are often cited as examples of negligence.

The vulnerability of the diabetic individual to a host of infections, both local and general, is a most important aspect of the disease. Minor and often trivial injuries may initiate spreading infection and gangrene that ultimately requires amputation to arrest the process. The relationship of trauma, mental and physical, to diabetes has been the subject of much legal controversy.

Malpractice

A cashier hurt her thumb while working in a drug store and received what appeared to be a trivial injury. She was treated by Dr. Werner, a physician designated by her employer and his insurance carrier under the Work-

"It has been claimed that certain glycosides have less irritability upon the heart and might even be safer to use. Evidence to satisfy such claims hold true only if the digitalis preparation possesses a greater therapeutic range."*

WIDER SAFETY MARGIN

GITALIGIN®†

"...possesses a greater range"*

Citaligin provides a maximum degree of control in cardiac therapy by reason of these distinctive clinical features **

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*Batterman, R. C.: Observations on the Clinical Use of Digitalis, in Diamond, E. G.: Digitalis, Springfield, Charles C. Thomas, 1957. **Bibliography available on request. †White's brand of amorphous gitalin.

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men's Compensation Law. She received medical treatment and continued to work for two weeks.

Her thumb became worse and upon the advice of her family physician she informed Dr. Werner that she was a diabetic. Some ten days later as the thumb still did not heal the insurance carrier directed Dr. Werner to discontinue treatment and instructed plaintiff to report to the defendant, Dr. Fornell, chief of its medical department.

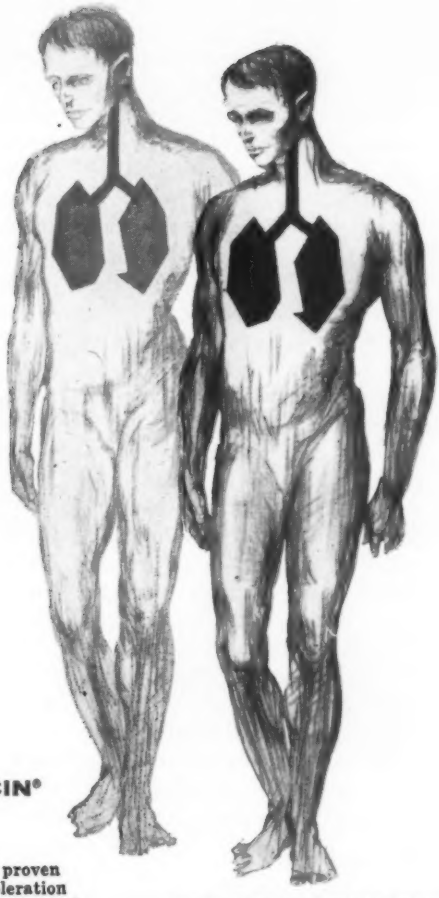
Dr. Fornell advised her that the nail of the thumb would have to be removed. Plaintiff told Dr. Fornell of her diabetic condition and that her family physician had advised her not to have any operation or cutting done unless the condition was properly controlled. Dr. Fornell became angry at what he termed interference of outside doctors.

"Trivial"

He stated that plaintiff was now his patient and should follow his instructions; that the operation was perfectly safe and a trivial matter, and would enable her to return to work promptly. The nail was removed the next day, and plaintiff returned home without receiving insulin treatment.

Plaintiff was treated at home for five days, but received no insulin. No blood-sugar tests or urine analyses were taken. The infection spread and on the fifth day she was rushed to the hospital where a portion of her thumb was amputated and long incisions made in her left wrist and forearm. Her diabetic condition was treated. She remained in the hospital two months and then received medical treatment for six months. Her left hand lost its mobility and remained badly disfigured.

Plaintiff was awarded $6,000 damages. The court said: There is some reason to agree with plaintiff's contention that "any skilled physician in the exercise of ordinary care, particularly one who like this defendant special-



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ized in injuries to workmen, should have had his suspicion aroused concerning a possible diabetic condition when a comparatively slight injury was taking an unusually long time to heal . . . in any event in such a case the least a physician should do is to inquire of the patient whether there is anything in her medical history to account for the delay in healing, and particularly whether she has any history of diabetes."

Even if the failure to do the above might all be ascribed to errors of judgment for which defendant may not be held liable "there is no justification for the failure of the defendant, when he was informed of the plaintiff's diabetic condition, to administer insulin before the operation and immediately thereafter. Every physician knows of the danger of infection in diabetic patients, and of the danger of operative interference in such cases".[1]

Wrong diagnosis

Defendant-physician treated a seven-year-old boy whose initial ailment was diabetes mellitus. The child's mother, under defendant's instructions, made daily urine tests, gave him insulin, and took him to visit defendant once a month for over a year and a half. During this time the child led a normal active life, gained weight, attended school where he was a good scholar.

One evening the mother found considerable sugar upon testing the urine. During the early morning hours the child became unconscious. His mother gave him a small quantity of maple syrup and he revived slightly. The defendant, to whom he was taken treated the now restless child for diabetic coma. When the child became worse the defendant washed out his stomach with soda and water. At no time did the physician test the urine or take the child's temperature. The child began to suffer from convulsions, was taken to the hospital where he was found to be suffering from profound insulin shock. He suffered cerebral hemorrhage, remained unconscious and paralyzed for a long time.

At the time of the trial some two years later, the child was an idiot, partially paralyzed, with a life expectancy of five years. The court held that the physician should have discovered that the child was suffering from insulin shock instead of diabetic coma. The symptoms of the two conditions are quite different.

In any event, witnesses testified that urine tests were of the utmost

importance in diagnosing the child's condition. The course of treatment followed because of the negligent erroneous diagnosis was harmful and resulted in the subsequent pitiful condition of the boy. The physician was adjudged guilty of malpractice.[2]

Traumatic diabetes

Whether or not trauma can cause, accelerate, or light-up diabetes is a controversial question among medical experts. The consensus seems to be that injury almost never is the primary cause of diabetes. Severe damage to the pancreas would be necessary. But trauma may be a contributing factor that brings to the surface a latent or unknown pre-existing diabetic condition.

An injury may advance the date of onset of diabetes in properly disposed individuals. An active individual who becomes bedridden, leads a sedentary life and tends to overeat may develop frank diabetes soon after an injury. The time interval must be a short one, a matter of a few weeks, in medical opinion, if the trauma and the disease are to be associated.

Infection, difficult to treat in a diabetic, which occurs as a result of injury, is a complicating factor which may make a diabetic worse, or accelerate a dormant diabetes. Antibiotics now lessen this danger.

Date of onset

Of considerable importance in the proof of traumatic diabetes is the actual date of onset of diabetes. Examination of the original record in *Lauricella vs. The City of New York*,[3] indicates that to determine whether the diabetes started before the injury or after the injury, statements of the victim's friends, his family, fellow workers and attending doctors must be obtained and critically analyzed.

All of these people must be questioned particularly as to their observation of the typical symptoms of diabetes in the plaintiff—excessive thirst, excessive urination, excessive ingestion of food, rapid weight loss, etc. Evidence of a diabetic heredity must be inquired into.

In *Missouri Pac. R. Co. v. Diffee*[4] an 18-year-old boy was injured when a train hit his car as he was crossing the tracks. An expert witness testified that the injuries received caused diabetes which would grow progressively worse. There was no injury to the pancreas. The plaintiff was awarded $15,000 damages.

The Court said: "It is admitted that traumatic diabetes is a rare occurrence, but we cannot say it does not exist . . . diabetes insipidus occasionally follows head injuries."

In a similar New York case experts for the plaintiff testified that diabetes was caused by the accident. Defendant's experts testified to the contrary. The court left the question to the jury who awarded damages to plaintiff. The court said:

"[Plaintiff's experts] admitted that diabetes might have been produced by a large number of causes, and that they could not positively say that in this case it was due to the injuries received, but from all the conditions and circumstances, the fact that before the accident plaintiff's testator was perfectly healthy and well, they expressed the opinion that [the diabetes was caused by the accident]."[5]

Where medical experts admit a causal relationship is possible, a jury can find it in fact exists.

Not a cause

DePaola v. Gitelman[6] is a case where the court held trauma experienced in an accident and the accompanying nervous reaction did not cause an acceleration and aggravation of a slight diabetic condition which had formerly cleared and become latent and inactive.

Six years prior to the accident plaintiff was placed on a diabetic diet which she abandoned in three weeks, claiming the diabetic condition had cleared. Three years later her physician testified to sugar in the urine, but apart from prescribing medication by mouth, did not treat her further. After the accident examination uncovered a very active diabetic condition.

At the trial plaintiff's physician testified that nervous reaction following trauma could activate a "controlled" diabetes. He further

testified that since plaintiff had not the usual diabetic signs prior to the accident he assumed she was cured. But he admitted that diabetes can exist without these symptoms and that once diabetes occurs, it is controlled rather than cured. Since plaintiff used no outside agents to "control" her diabetic condition prior to the accident the court held it did in fact exist and any increase brought about by nervous upset following trauma was inconsequential.

Not excessive

But in a Georgia case a different set of facts caused the jury to find that trauma did aggravate plaintiff's diabetic condition. Plaintiff was injured when his car was struck by a truck. Before the collision he had been in good health and was a controlled diabetic. As a result of the injuries, his diabetic condition was aggravated and necessitated a very restricted diet; he was crippled as well. The court held that $30,000 damages were not excessive.

In a New York case traumatic diabetes was found to be the cause of death by the industrial accident board despite an opinion by a medical referee that death was not due to an accidental blow on the leg. In this case a worker with a prior diabetic condition sustained a blow on his left leg.

Prior to the accident he had been an uncooperative patient, failing to test urine, failing to take insulin, overeating. The trauma markedly interfered with his prior diabetes causing vomiting, dehydration, emotional disturbances and disturbance of sugar tolerance. Diabetic coma supervened and could not be controlled, with death following. Was death due to the worker's neglect of his diabetic condition or to the accidental blow on the leg? The board found for the worker.[7]

Compensation

Watson suffered from diabetes mellitus. He had an ingrown toenail removed by a physician, infection set in resulting in a thrombophlebitis. This in conjunction with diabetic gangrene in the big toe caused his death. Watson's wife tried to recover under workmen's compensation, claiming trauma at work caused the injury to the toe. Medical evidence did not establish that death resulted from accidental injury and recovery was denied.[8]

In 1936 in the course of his employment, a diabetic employee accidentally bruised his toe. The toenail came off, infection spread, gangrene developed and spread. He had four amputations and the

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stump never healed. His last illness was diagnosed as pneumonia. The cause of death was said to be nephritis, diabetes and arteriosclerosis.

The question at the hearing was whether the injury was the "cause" of death. One month after the injury occurred one of the attending physicians said in a report to the insurance carrier: "In a diabetic, an injury of this kind, though trivial at the outset, may reach most serious proportions and in the case of [deceased] a very slight injury is unquestionably progressing to the point where he will lose his leg if not his life." The court held that the injury accelerated and was the cause of death.[9]

Where the court can apportion the award according to the contribution of different factors, it will do so. This was the case in *B. F. Avery & Sons vs. Carter*[10] where molten iron accidentally fell upon and burned the top of a toe of an employee and his death, which followed, was held due both to an infection thereof and pre-existing diabetes. In most cases, physicians would be hard put to decide how to so apportion cause of death where it is due to a combination of factors.

Factor

Deceased was a porter 72 years of age. He was injured by being caught between the door and the casing of an elevator dur-

NEWS ROUNDS

Combine Medical, Social Sciences

Launch New Program—A training and research effort directed toward effective collaboration between the social sciences and health fields has been established at Duke University. One of the first of its type in the nation, the program is concerned primarily with research that utilizes the combined knowledge and skills of specialists in the social sciences and in medical-health fields. Other principal activities are teaching at the undergraduate level and training research investigators in medical sociology.

ing the course of employment. The employer contended that deceased died as a result of diabetes or influenza. The court upheld an award in favor of deceased's widow. The accident was at least a factor in producing death. The court said:

"If we assume that before or at the time of the accident the decedent was suffering from bodily disease, that does not necessarily defeat compensation. Death may be found as having been caused by an accident, although there was a diseased bodily condition prior to the injury, without which death would not have ensued, where as may be inferred here, the undeveloped and physicial dangerous conditions are set in motion producing such result."[11] No attempt was made to try to apportion the award according to the different factors.

Deceased employee was afflicted with diabetes mellitus. She was accustomed to giving herself insulin injections. Shortly after arriving home one evening she became ill. A company nurse was called to attend her, but did not give decreased insulin despite deceased's request. The following morning a doctor attended patient. Two days later she was taken to the hospital where she died the following day of diabetes.

No insulin was given her until she arrived at the hospital. The court held that death was not a direct result of the company nurse's failure to administer insulin and an award in compensation was denied.

It frequently happens that disease and accident are both present in cases arising under accident insurance policies. The question arises whether death or injury resulting therefrom is covered by the policy. Liability exists if the accident is the sole cause of death or disability independently of the disease.

Insurance

Maryland Casualty Company v. Marrow was a case in which deceased insured accidentally stubbed his toe against a chair and broke the middle phalanx. An operation was desirable, but delayed because insured was a diabetic.

Gangrene developed and spread and insured's leg was amputated. Despite the operation insured died. The court held there could be no recovery under the policy. If the accident aggravated the disease or if the disease aggravated the effects of the accident and actively contributed to the

disability or death occasioned thereby, there can be no recovery on the policy.[12]

But in a 1938 Pennsylvania case[13] recovery was allowed on a similar policy. The insured sustained a severe burn when he fell asleep while exposing his foot to the rays of a heat lamp to heal an ingrown toe nail which had been partly removed by a chiropodist. The burn developed a blister, infection set in when the blister broke, amputation was required, and death from blood poisoning resulted. The court held that insured probably would have died of the injury alone even were he not a diabetic.

Disability

Accident policies usually provide for the payment of a specific sum if insured becomes totally disabled by an accident within the policy. Many life insurance policies include clauses on total disability. The law reports are replete with cases fought on the question of what is total disability.

A contractor suffered from diabetes, was put on a rigid diet, received daily insulin injections and was forbidden from continuing to engage in his work as a contractor. Prior to his disability he actively worked 12 to 15 hours a day. After his affliction he devoted little time to business, limiting himself to supervisory activity. Consequently his business depreciated considerably. The court held he could recover under the total disability clause.

But in *Penn. Mut. L. Ins. Co. vs. Schrader*[14] the plaintiff was held not to be totally disabled within the meaning of his insurance policy. He was a bank cashier who also conducted a real estate and insurance agency, and he resigned his position as cashier because of an attack of diabetes, but continued to conduct his other ventures profitably.

Many factors are taken into consideration in evaluating the damages in a case of traumatic diabetes. Diabetes is a chronic disease, and may well have an effect on an individual's general outlook on life and emotional well being. People with a chronic disease tend to become easily depressed or uncooperative or resistant to treatment. A traumatic diabetic has a reduced life expectancy. Diabetics have a peculiar susceptibility to accidents, and have less resistance to the effects of accidents.

In a 1952 case plaintiff received a $30,000 verdict where his diabetes was severely aggravated, he was unable to work,

and suffered great pain. His earning capacity of $4200 a year at the time of the accident and his life expectancy of over 12 years, medical expenses of $1,000, and pain and suffering and the fact that he lost his livelihood were all factors considered by the court in holding damages were not excessive.

Plaintiff was admitted to the hospital with a diabetic ulcer. He was treated and burned by a heat cradle. He developed fever and his diabetes was aggravated. Some gangrene developed, but disappeared. Plaintiff had lost his other leg as a result of gangrene. For four or five months plaintiff was much concerned over the possibility of losing his remaining leg. The court held a verdict of $5500, of which $1000 was for medical expenses, was not excessive. Plaintiff was entitled to be compensated for his mental suffering—for his fear of losing a leg.

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3. 207 Misc. 203 137 N.Y.S 2d 687, (1955).
4. 212 Ark 55, 205 S.W. 2d. 458 (1947).
5. Eicholz v. Niagara Falls Co. 68 A.D. 441, 73 N.Y.S 842, 848 (1902). Affirmed 174 N.Y. 519, 66 N.E. 1107 (1903).
6. 137 N.Y. S 2d 684 (1954).
7. Moniot vs. Empire State Wine Co. et. al. 282 AD 899, 124 NYS 2d 880 (1953).
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10. 205 Ky. 548, 226 S.W. 50 (1924).
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12. 213 F 599, 52 LRA (N S) 1213 (1914). Accord Romanoff v. Commercial Travellers Mutual Accid. Assoc. 243 A.D. 725, 277 NYS 291 (1935).
13. Arnstein v. Metropolitan L. Ins. Co. 329 Pa. 158, 196 A 491.
14. 289 Ky. 469, 158 S.W. 2d 964 (1941).

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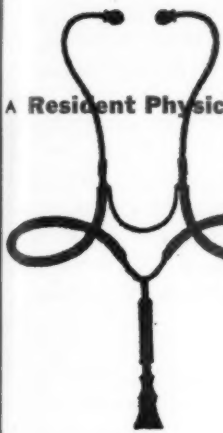

Mediquiz

These questions were prepared especially for RESIDENT PHYSICIAN *by the Professional Examination Service, a division of the American Public Health Association. Answers will be found on page 172.*

1. An acute illness characterized by headache, conjunctival injection, leukopenia, and 5-10 day course is:

A) Trachoma.
B) Weil's disease.
C) Serum sickness.
D) Phlebotomus fever.
E) Dengue.

2. Paroxysmal cold hemoglobinuria characteristically occurs in:

A) Syphilitics reverting to sero-negativity.
B) Secondary syphilis.
C) Late latent syphilis.
D) General paresis.
E) Primary syphilis.

3. The most frequent complication of cardiovascular syphilis is:

A) A Herxheimer reaction.
B) Bernheim's syndrome.
C) Ventricular arrhythmia.
D) Congestive heart failure.
E) Cardiac tamponade.

4. The use of Benemid in the treatment of gout is based upon its ability to:

A) Depress connective tissue sensitivity.
B) Mobilize urate from peripheral deposits.
C) Prevent the absorption of ingested purines.
D) Depress hepatic urate formation.
E) Block tubular resorption of urate.

5. The commonest cause of death in cryptococcosis is:

A) Renal failure.

B) Intestinal tract hemorrhage.

C) Congestive heart failure.

D) Meningo-encephalitis.

E) Respiratory insufficiency.

6. Besides miosis, ptosis, enophthalmos and anhydrosis, which of the following reactions occur in Horner's syndrome?

A) No reaction of the pupil to light and near fixation, decreased sensitivity to atropine and cocaine and hypersensitivity to adrenalin.

B) Sluggish reaction of the pupil to light and near fixation, hypersensitivity to atropine and cocaine and decreased sensitivity to adrenalin.

C) Normal reaction of the pupil to light and near fixation, decreased sensitivity to atropine and cocaine and hypersensitivity to adrenalin.

D) Normal reaction of the pupil to light and near fixation, decreased sensitivity to adrenalin and hypersensitivity to atropine and cocaine.

E) Normal reaction of the pupil to light and near fixation and increased sensitivity to atropine, cocaine and adrenalin.

7. In phenylpyruvic oligophrenia, the significant biochemical lesion is the patient's inability to convert:

A) Benzoic acid to hippuric acid.

B) Phenylalanine to tyrosine.

C) Phenylalanine to serotonin.

D) Phenylpyruvic acid to phenyllactic acid.

E) Phenylalanine to phenylacetic acid.

8. The findings of investigations conducted by Kallman, Barrera, Hoch, and Kelly concerning the relationship between mental deficiency and schizophrenia indicate that:

A) Although both are common psychiatric conditions, they are rarely found in the same patient.

B) There is no demonstrable association between the two disorders.

C) Mental deficiency predisposes to schizophrenia.

D) More than 50 per cent of the relatives of mental defectives are schizophrenics.

E) Mental defectives who later develop a form of schizophrenic illness are a genetically defective group.

9. By parapraxis (a symptomatic act) is meant:

A) A fortuitous incident revealing the permanent character of the individual.

B) An acting out of resistance to change in adaptational patterns.

C) A conscious act interfered with by conflicting unconscious motivation.

D) A symptom characteristic of a specific psychiatric syndrome.

E) An act manifesting the patient's attempts at self-healing.

10. The first modern usage of the term psychiatry is usually credited to:

A) Littré.

B) Thurber.

C) Ebbinghaus.

D) Kraepelin.

E) Pinel.

11. A research psychologist is interested in developing a new projective test. Which one of the following situations would be *least* likely to suggest an idea for a projective test to him?

A) The observer records the patient's reactions to a stress interview.

B) The patient is asked to rank the articles in a newspaper with regard to their interest to him and to state his reasons.

C) The patient is asked to describe in detail his feelings about the hospital.

D) Music is played, and the patient is asked what it suggests to him.

E) A list of very personal questions is drawn up, and the patient's task is to answer in the affirmative or negative.

12. A basophilic adenoma of the hypophysis is thought to be related to:

A) Cushing's syndrome.

B) Hypothyroidism.

C) Gigantism.

D) Hypersomnia.

E) Acromegaly.

Answers on page 172.

What's the Doctor's Name?

Victor R. Jablokow, M.D.

He was born in Almora, India, on May 13, 1857, the eldest of ten children of a British general. He received his education in London while staying at the home of his physician uncle.

He studied medicine at St. Bartholomew's Hospital in London and graduated in 1879. In 1881 he entered Indian medical service after spending two years at sea as a ship's surgeon.

He returned to England and studied bacteriology — a new science at that time — acquiring a diploma in public health and a considerable knowledge of the most recent techniques in microscopy, incubation and preparation of culture media.

In 1892, in India, he commenced a series of special in-

vestigations on malaria and in 1895 produced experimental proof of the theory that malaria is spread by mosquitoes. Later he investigated the life cycle of the parasite.

He retired from Indian medical service in 1899 and became a professor of tropical medicine at the Liverpool University. He received the Nobel Prize for Medicine in 1902 and was knighted in 1911. In 1913 he became a professor for tropical diseases at Kings College, London, and later, director-in-chief of the Institute and Hospital for Tropical Disease which bore his name and was founded by the Prince of Wales.

During World War I he was War Office consultant in malaria. Throughout his life he spent much time writing music, novels and other literary works, among them *Philosophies* (1910), *Psychologies* (1919), *The Revels of Orsera,* (1920), *Memoirs* (1923).

In his late years he was haunted by poverty. In 1932 his friends and admirers initiated a subscription fund to assure him a carefree old age. He was never able to take advantage of it as he died the same year (September 17, 1932) in London, at the age of 75.

Can you name this doctor?
Answer on page 172.

VIEWBOX DIAGNOSIS

(from page 23)

CANCER OF RIGHT KIDNEY

Note the enlargement and distortion of the right collecting system. The radiolucencies in the renal pelvis ureter and bladder are due to blood clots.

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MEDIQUIZ ANSWERS

(from page 167)

1 (D), 2 (C), 3 (D), 4 (E), 5 (D), 6 (C), 7 (B), 8 (B), 9 (C), 10 (A), 11 (E), 12 (A).

•

WHAT'S THE DOCTOR'S NAME?

(answer from page 170)

SIR RONALD ROSS

•

RESIDENT RELAXER

(puzzle on page 29)